

University of Texas Bulletin

No. 2630: August 8, 1926

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BUREAU OF SCHOOL INQUIRY
DIVISION OF EXTENSION
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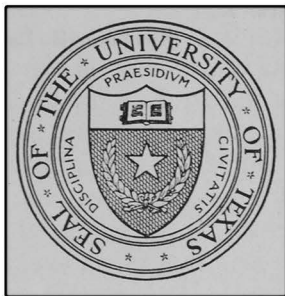
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The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government.

Sam Houston

Cultivated mind is the guardian genius of democracy. . . . It is the only dictator that freemen acknowledge and the only security that freemen desire.

Mirabeau B. Lamar

GALVESTON SCHOOL SURVEY

This study was undertaken by the Bureau of School Inquiry at the invitation of Superintendent E. G. Littlejohn and the Board of Education of the City of Galveston. It was the desire of the superintendent and board for the survey to enable the school authorities to answer two questions: "Is the City of Galveston spending enough for the maintenance of its schools or is it spending too much?" "Is an addition to the maintenance tax rate necessary?" A further limitation was placed on the study by the funds that were available for paying the expenses of the study. For this purpose the board appropriated \$750.

The report is divided into three sections. The first section deals with Buildings and Equipment, the second with certain aspects of School Finance, and the third with Teachers' Salaries and Cost of Living, Child Accounting, and the Curriculum. The report makes no pretense of thoroughness but it is believed it is sufficiently extensive to warrant the conclusions reached.

While the members of the survey staff, consisting of Dr. B. F. Pittenger, Acting Dean and Dean-elect of the School of Education; Dr. H. T. Manuel, Associate Professor of Education in the University of Texas; and the writer, have worked in close coöperation, responsibility for Section II rests with Dean Pittenger, for Section III with Associate Professor Manuel, and for Section I with the writer.

Graduate students of the School of Education who ably participated in various aspects of the study are Messrs. L. B. Cooper, Bertram Harry, J. H. Head, J. N. Mosely, and W. R. Smith.

Each of the staff made two or more visits to Galveston and each of the assistants made one visit, the purpose being to get first-hand information and to determine what data might be secured through questionnaire and local school records. State and local records and reports, personal interviews, questionnaire, and actual scoring of buildings and equipment constituted sources of information.

Each member of the staff testifies to the fine spirit of coöperation and patience exhibited by the Board of Education, the administrative staff and office force, the teaching staff, the city assessor and collector, and the county clerk in assisting with the assembling of data. Thanks are due Dr. Carter Alexander for the use of certain data assembled by him in the recent Port Arthur Survey, and the State Department of Education at Austin for valuable data.

No member of the staff received any compensation for his services. If the survey serves the City of Galveston in the solution of some of its problems of school finance and the data here presented serve the cause of education in Texas, the staff will be fully repaid for its efforts.

The writer is under lasting obligations to his colleagues, Doctors Pittenger and Manuel, who have undertaken the major portion of the inquiry. Without their efficient and unselfish service, the study would have been impossible.

T. H. SHELBY, *Dean of Extension
and Director School Inquiry Bureau.*

GALVESTON PUBLIC SCHOOLS

SECTION I

BUILDINGS AND EQUIPMENT

T. H. SHELBY

The old adage which states that Mark Hopkins on one end of a log and young Garfield on the other constitute the condition for a first-class college, has, like many other half truths, interfered with the progress of education. Such a school is certainly far from up-to-date at the present time. If one is to judge from recent reports and statistics in the United States, the adage has lost much of its influence in present-day school affairs. An outstanding feature of modern American education has been the great expenditures that have been made for school plants and school equipment. These material evidences of expenditure of tax money have often made a stronger appeal to the business interests than have the less tangible, but no less important, needs for teaching personnel. Both are essential to the best work, but if either must be neglected certainly it should not be the personnel side. It is patent to all who have studied the problem, however, that first-rate teachers are often greatly hindered in their tasks because of poor housing facilities and inadequate and out-of-date furniture and equipment. No city that pretends to keep abreast of the progress of the times can afford to neglect the material aspects of its educational program.

In the judgment of the committee on School House Planning of the National Education Association, in its report in 1925, the following are essential qualities of a school building:

- (a) Adaptation to Educational Needs.
- (b) Safety.
- (c) Healthfulness.
- (d) Expansiveness.
- (e) Flexibility.
- (f) Convenience.

- (g) Durability.
- (h) Aesthetic Fitness.
- (i) Economy.

Standards for elementary school buildings, as determined by the studies of Strayer and Engelhardt of Columbia University, which are in general use today, include the following points:*

I. SITE

- A. Location.
 - 1. Accessibility.
 - 2. Environment.

II. BUILDING

- A. Placement.
 - 1. Orientation.
 - 2. Position on site.
- B. Gross structure.
 - 1. Type (extent of fireproofness).
 - 2. Material.
 - 3. Height (number of stories).
 - 4. Roof.
 - 5. Foundation.
 - 6. Walls.
 - 7. Entrances.
 - 8. Aesthetic balance.
 - 9. Condition.
- C. Internal structure.
 - 1. Stairways.
 - 2. Corridors.
 - 3. Basement.
 - 4. Color scheme.
 - 5. Attic.

III. SERVICE SYSTEM

- A. Heating and ventilating.
 - 1. Kind.
 - 2. Installation.
 - 3. Air supply.
 - 4. Fans and motors.
 - 5. Distribution.
 - 6. Temperature control.
 - 7. Special provisions.
- B. Fire protection system.
- C. Cleaning system.
- D. Artificial lighting system.

*Standards for Elementary School Buildings, Strayer & Engelhardt, New York: Teachers' College, Columbia University

- E. Electric service system.
- F. Water supply system.
- G. Toilet system.

IV. CLASSROOMS

- A. Location and connection.
- B. Construction and finish.
- C. Illumination.
- D. Cloak rooms and wardrobes.
- E. Equipment.
 - 1. Seats and desks.
 - 2. Teacher's desk.
 - 3. Aquarium.
 - 4. Bookcase.
 - 5. Bulletin board.
 - 6. Clock.
 - 7. Dictionary holder.
 - 8. Filing cabinet.
 - 9. Flag.
 - 10. Globe.
 - 11. Inkwells.
 - 12. Knives.
 - 13. Large dictionary.
 - 14. Maps.
 - 15. Pencil sharpener.
 - 16. Phonograph.
 - 17. Pictures.
 - 18. Pointers.
 - 19. Projectoscopes.
 - 20. Pupils' chairs.
 - 21. Sand table.
 - 22. Scissors.
 - 23. Set of measures.
 - 24. Supply cabinet.
 - 25. Table.
 - 26. Teacher's chair.
 - 27. Thermometer.
 - 28. Umbrella stand.
 - 29. Visitors' chairs.
 - 30. Waste basket.
 - 31. Window shades.
 - 32. Window stick.

V. SPECIAL ROOMS

- A. Large room for general use.
 - 1. Play room.
 - 2. Auditorium.

3. Library.
4. Gymnasium.
5. Swimming pool.
6. Lunch room.
- B. Rooms for officials.
 1. Offices.
 2. Teachers' rooms.
 3. Medical suite.
 4. Janitor's room.
- C. Other special service rooms.
 1. Household arts room.
 2. Industrial arts room.
 3. General science and drawing room.
 4. Storage and supply room.

This list, when analyzed in detail, indicates the standards for determining the degree of fitness of a school building for carrying on school work effectively.

While the present survey is not particularly concerned with a building program for the City of Galveston, no study concerned with the problem of financing education in the city would be complete that did not give some estimate of the adequacy of the building situation. With the question of expenditures for teaching equipment and apparatus, which are generally included in annual expenditures for maintenance, we are directly concerned.

In common with most, if not all, cities whose school history extends over a long period of years, Galveston has its high spots and its low spots. One of the elementary schools for whites, the Brewer W. Key, is the last word in both building and general furnishings, while another building, the Alamo, serving white children in one of the better sections of the city, is totally unsuited for school use and ought to be abandoned at once. Between these extremes are the other buildings, some of them having old portions, to which additions of a modern sort have been made, more or less successfully. As might be expected, conditions in the schools for negroes, with the exception of the High School, are much less satisfactory than in the schools for whites.

There are six large schools and one small one for elementary white children. One secondary school, Ball High School, serves all the white children of the city. All, except one of the elementary schools, maintain the first seven grades. Ball High School includes grades 8, 9, 10, and 11. No junior high school has been established in the city.

Two of the elementary schools, the Alamo and the Rosenberg, are of the old type. They are high, with a great deal of waste space underneath. Rooms are ill-shaped and so arranged that the light comes either from the short axis or from two or three sides. Many of the rooms are dark and dungeon-like in appearance and effect.

Three white elementary schools, viz., Davy Crockett, Sam Houston, and San Jacinto, and also the Ball High School, have new fireproof portions added to old portions. Such efforts, while not altogether satisfactory, are commendable in a city where finances must be carefully considered. It is the plan of the authorities in time to eliminate the old portions and replace them with new portions in keeping with the present additions. These are fireproof and generally modern and standard in most respects.

Galveston authorities are to be commended for establishing large elementary schools. The city is compact and well served by streets and street car transportation. Large schools not only effect economies in heating, janitor service, principals, and supervisors, but they make possible a much richer program of studies for the children, especially in extra-curricular activities.

Number of Regular Class Rooms, Number of Special Rooms, and
Student Enrollment of Elementary Schools of Galveston

Name of Building	Number of Class Rooms	Number of Special Rooms	Students Enrolled
Davy Crockett.....	14	6	544-K.72*
Alamo	16	3	440
Brewer W. Key.....	15	10	485-K.48
Rosenberg	23	5	808-K.51
Sam Houston	15	6	581-K.64

*K means kindergarten. The number indicated in the kindergarten is in addition to the other enrollment.

San Jacinto	19	8	684-K.66
West End	4	0	86
Johanna Runge, Kin.....	1	1	K.39

Seating and Pupil Enrollment

Class Interval. (No. of seats or pupils enrolled)	Seating Capacity. (No. of rooms)	Pupils Enrolled (No. of rooms)
20-29	0	15
30-39	19	35
40-49	43	11
50-59	2	3
	—	—
Total.....	64	64

The table above indicates that there is on an average a sufficient number of seats for the pupils enrolled. The table represents sixty-four rooms selected at random. The table means that there were no rooms with seating capacity within the range 20 to 29 while there were fifteen rooms having from 20 to 29 children. Nineteen rooms had from 30 to 39 seats and thirty-five rooms had from 30 to 39 pupils enrolled in them. The observation of all field workers was to the effect that rooms, in general, were large and were supplied with ample seats. Practically no rooms were crowded in this respect. Of fifty-three rooms observed in old buildings or in older portions of buildings, twenty were lighted from the left side of the pupils only; thirteen from left and from some other direction, either right or rear also; fourteen from rear and from some other direction; two from rear only; four from right and from some other direction; none from right only, and none from front.

It is thus seen that only a little more than one-third of the rooms in older portions of buildings have light from the left only. Windows were improperly placed and improperly spaced in most buildings, exceptions being the Brewer W. Key and new portions of the old buildings. Windows were often so placed as to be near the front of the room, causing the light to shine in pupils' eyes. Distances between windows were too wide. Windows were often irregularly placed around the room. In several rooms,

seats on the far side of the room were so imperfectly lighted as to make it impossible for pupils to see on cloudy days. Artificial lighting, at best, consisted of one or more large "drops" in the center of the room. At the worst, there were no lights at all to give relief on cloudy days.

A modern school building.

Three buildings will be discussed in detail. The Brewer W. Key has been referred to as a model of what a modern elementary school building should be. It is situated on a full block of ground in a good section of the city. It is constructed with a hollow square in the center. It contains two stories and no basement. The building is entirely fireproof as to corridors and stairways. The only combustible material is found in the doors and in the floors of class rooms. Halls are light and ample of width with no unnecessary space. Rooms are arranged with windows properly grouped according to standard specifications along the long axis. Rooms are of correct dimensions, about 22x30, windows extend as near the ceiling as possible and are about three feet from the floor. Ample blackboards of slate are provided. Economical cloak rooms with artistic effect have been provided for each room as a sort of built-in feature. The arrangement seems quite satisfactory. Special rooms are a kindergarten room with necessary storage, private toilet, etc.; an auditorium-gymnasium combined, with basket ball court, ample stage, light socket for stereopticon, and folding chairs. Shower baths and dressing rooms are adjacent. The lunch room is a modern cafeteria of the most approved type. Kitchen equipment is of the best type. Serving equipment is in keeping with the kitchen equipment; tables and chairs of the most approved type are used. The room is clean, attractive, light, and airy. The sanitation is up to standard. The whole tone of the place is wholesome and uplifting. A book room has been provided for surplus textbooks. The office of the principal is ample, well lighted, well finished, and commodious, with private room for principal and waiting room in which the secretary receives visitors. The music and drawing rooms

provide comfortable quarters for these important branches of work. The shop kitchen provides modern equipment for teaching cooking to students, not only of this school but of other schools in the vicinity. An airy, light room serves for a library. It is beautiful and well finished. It contains ample shelf room for books, but there is need for additional chairs and desks for pupils. The clinic is well equipped for emergency cases, with medicine cabinet, emergency kit, cots, etc.

This building has a large playground, though it is somewhat flat and poorly drained. A portion of the ground is covered with cement, the remains of the floor of an old building which the present one displaced. This should be eliminated for the protection of the children. (The playgrounds of most of the Galveston schools are covered with shell, a material unsuited for playground surfacing. The danger of abrasions when children fall has the effect of producing a cautious attitude which detracts from the freedom of play activities.) A small amount of playground equipment has been provided. A row of palms around the grounds adds charm and beauty to the campus.

The building has up-to-date steam heat, with oil-burning furnace and automatic control. The furnace is in a fire-proof room with metal doors at outlets to the building. The gymnasium-auditorium is used for games by different groups of children and for physical training classes during the day, for basket ball during the afternoon and evening, for assembly purposes and for special programs for the school, and for the entire community. The use of the school as a real community center is entirely feasible in a building of this type. The score given this building by three independent scorers was more than 900 on a basis of 1,000 for a perfect building. One criticism of the building is that in common with other new additions to the city, the walls of classrooms and corridors are white. This is not in keeping with the best practice, or correct standards. The children who attend school in this building are, in the main, to be congratulated. Doubtless it is the intention of the school

authorities, as rapidly as finances will permit, to have all buildings approximate this one.

An antiquated school.

A little distance up the island in a good residential district is another building which is being used as an elementary school for the white children of Galveston. To say that it is totally unsuited to the purpose is not putting the matter too strongly. The ground consists of about one-quarter block, practically all of it being covered by the building. A small amount of play equipment is crowded into one side of the grounds. The exterior of the building is of brick covered with stucco. The interior is largely of inflammable material. The building is high, with a basement and two floors all above ground. The ceilings are high. The basement is dark, largely unfinished, insanitary and contains much waste space. Toilet facilities in the basement are antiquated, dark, uncomfortable, and very unsanitary. Open spaces with benches on the cement floor indicate that children eat their luncheon, and in rainy weather play in the basement. On one side, in a dark and forbidding room, is a small amount of kitchen equipment for serving sandwiches, soup, etc.

The interior of the first and second floors is of inflammable material throughout. Entrances to the first floor are satisfactory, but those to the second floor are not widely separated and are on interior walls. Corridors are dark with a dingy, unsightly appearance. The main rooms are ill-shaped and too large. Windows are along the short axis or are on two and sometimes three sides. Windows face many of the children. Mullions are too wide, making cross-bands of light. Seats farthest from the windows are too dark on the best days. Artificial lights in some of the darkest rooms are "drops" in the center of the room.

Many rooms have no sort of cloak room, and none of them have satisfactory arrangements. Portions of blackboards are between windows and therefore cannot be seen. Arrangements for taking care of books and teaching equipment are very meager in all rooms. Colors of walls and

ceilings are not uniform and not satisfactory in any room. All rooms need a refinish and a general brightening up. There is no satisfactory assembly room, though folding doors permit of throwing rooms together. If this building cannot be abandoned, then by all means it should be remodeled, in so far as this is possible, and refinished so as to render it somewhat attractive and more serviceable.

As might be expected, many of the desks are old and unsightly. Perhaps refinishing would put them in usable condition. Floors are worn and need refinishing. Window shades are wholly lacking or are inadequate. Lighting should be corrected by taking out mullions and grouping windows on one side of the room. They should be extended as near as possible to the ceiling and raised somewhat from the floor. The basement should be entirely remodeled and properly finished. Galveston cannot afford to allow her native white children to continue under such conditions as prevail in this school. The refinishing that has been given the principal's office indicates something of the possibility of improving conditions with the expenditure of a relatively small amount. This will make the building habitable until such time as provision can be made for a new building. It is social short-sightedness for a community to allow its young children from good homes to come under the unwholesome influence of such a school plant. The indefinable moral influences are none the less real because indefinable. Children from poor homes are entitled to wholesome influences in their school life, to the end that standards may be raised. Approximately 400 was the score given this building by three scorers working independently. Correct standards dictate that a building whose score is so low should be abandoned.

Teaching equipment such as dictionary, reference books, charts, maps, globes, sand table, supply cabinets for construction material, filing cases, and provision for displaying material about the rooms are either wholly lacking or are most inadequate.

Example of attempt to modernize a building.

In the Davy Crockett building we have a good illustration of the effort Galveston has made to renovate old buildings and to add new portions. The new portion is modern and fireproof. It is the plan of the school authorities to replace the old portion with a new one as time renders the old portion no longer of practical service. The old portion is two stories above an open basement, with eight class rooms and a principal's office. The basement contains, besides storerooms, a cafeteria. A large part of the basement consists of waste space where lunches are eaten and play engaged in in rainy weather.

The new addition consists of two stories of fireproof, modern construction. The floors are on different levels from those of the old portion, making stairways necessary in getting from one to the other. The new portion contains standard class rooms, properly lighted and well finished. Special rooms in the new portion consist of a combination gymnasium-auditorium, which is accessible to the public, without disturbing the school activities; modern toilet arrangements; a modern heating room, with an approved heating system, shower baths, kindergarten, and drawing room. The school is well provided with playground space. With the exception of class room and instructional equipment, this school is fairly well provided for. The score given was 785.

Supplies and equipment.

Among the equipment needs are clocks for class rooms, a modern bell system for the building, more maps and globes, more bookcases, dictionaries and holders for rooms down to the third grade, filing and supply cabinets for rooms of the old building, better sand tables for the lower grades, and umbrella stands. The library facilities are inadequate. There is need for study tables, reading material, and reference books.

What has been said of the supplies and equipment in this building applies with greater emphasis to the Alamo building and with less emphasis to the Brewer W. Key building.

It applies with varying emphasis to all the other buildings for white children of elementary grades.

It is impossible, without a complete inventory, to determine the exact extent of the shortage in this direction. Such an inventory, it was thought, would hardly justify the time and expense of taking it. In many cases, it was found that the scant supplies and equipment found had been furnished by the teachers themselves out of their meager salaries. It is suggested that the administrative authorities make a rather careful inventory, check it with the standards set forth on page 7 and begin at once to increase the facilities for carrying on first-class instruction. It is not beside the mark to suggest an item of \$20,000 to \$25,000 per year, over and above what is now being spent for equipment and instructional supplies. In addition, special provision should be made for renovating and modernizing buildings. Galveston can ill afford to neglect these important factors in school success. Galveston should also begin at once a study of the problem of expansion of the building program, which is inevitable, if the recommendations contained in another section of this report are carried out and the city continues to grow.

HIGH SCHOOLS

Galveston has one high school for white children and one for colored children. The Central High School, for colored children, has an old portion which has been renovated and somewhat modernized and a new modern fire-proof portion. In general the building is in good condition, the total score being 612. The new portion is in class with additions that have been made to other buildings in the city. It is first-class in every respect, with gymnasium-auditorium, clinic room, shower bath rooms, modern heating system, modern toilet facilities, principal's and teachers' rooms, and modern library.

Laboratories for physics and chemistry are first-class, with respect both to equipment and laboratory apparatus.

Pictures in corridors and rooms lend attraction to the place. Home economics and industrial training laboratories, while not first-class, are, nevertheless, serviceable and commendable. The lunch room service is somewhat inadequate, though better than that found in some of the elementary white schools.

Worthy of special mention is the library, which is a branch of the Rosenberg Public Library, so arranged as to be used by adults in the community as well as the children of the school. It is attractive, well equipped, and furnished with thousands of volumes of reference books and general reading matter.

Galveston is to be congratulated on the good work that is being done for the colored children of high-school age.

BALL HIGH SCHOOL

The Ball High School has an older portion, to which a modern addition has been made to meet the increased enrollment. For many years the Ball High School was considered the standard for high-school buildings in the State. In many respects the old portion has become out-of-date. It is only semi-fireproof. Its rooms are large and many of them are ill-shaped and poorly lighted. The basement is dark and contains much waste space. The floors of the new portion are not on the same level as those of the old portion and, therefore, stairways are necessary in getting from one to the other.

The building, in its present form, contains provisions for twenty-seven regular class rooms with a seating capacity of 864, and 18 shops and laboratories, with a total accommodation of 429 students.

The following table, furnished by Principal W. A. James, will indicate the extent of accommodation :

Number of Seats in Class Rooms, Laboratories, Shops, Kitchen, etc.
in the Ball High School, March 15, 1926

Room Number		Number Seatings Laboratories	Class Rooms
Basement Rooms			
8.	Cooking Room	20	
9.	Blacksmith Shop	8	
11.	Wood Shop	20	
12.	Sewing Room	24	
16.	Sewing Room	24	
17.	Auto-mechanic Shop	8	
20.	Music Room	40	
First Floor Rooms			
101.	Class Room		32
102.	Class Room		35
103.	Class Room		35
104.	Class Room		32
105.	Class Room		33
106.	General Science Laboratory.....	24	
107.	Class Room		34
108.	General Science Laboratory.....	24	
109.	Class Room		34
110.	Class Room		35
111.	Class Room		30
112.	Class Room		30
113.	Class Room		30
114.	Class Room		30
115.	Class Room		33
116.	Class Room		30
117.	Class Room		30
118.	Class Room		32
119.	Class Room		40
120.	Class Room.....		40

With a total enrollment to March 5 of 1,061 in the high school and a total belonging on that date of 940, it is evident that the building contains ample room for accommodating the present student body. As indicated in another portion of the report, Galveston has not enrolled in its high school as large a proportion of students as should be expected. If the course should be liberalized in the direction of fewer prescriptions, it is probable that some of the shops and laboratories would prove inadequate.

This is already true in the Commercial Department, according to the instructor, Mr. J. H. Hardie. He states that the department has suffered greatly for several years for lack of room. At the beginning of the current term, the work was again curtailed. The course in commercial law was planned for two semesters, but for this year the second semester's work had to be eliminated. The low and high fourth-year bookkeeping classes are taught in the same room at the same time. The lecture work in the one must, inevitably, interfere with the laboratory work of the other. Expansion of the program for next year is inevitable to meet the demands made upon the department.

Number of Seats in Class Rooms, Laboratories, Shops, Kitchen, etc.,
in the Ball High School, March 15, 1926

Room Number	Number Seatings	
	Laboratories	Class Rooms
Second Floor Rooms		
201.	History Laboratory	34
202.	Class Room	30
203.	Class Room	30
204.	Class Room	30
205.	Class Room	30
206.	Class Room	33
207.	Class Room	28
208.	Class Room	30
209.	Class Room	28
210.	Class Room	30
211.	Shorthand Laboratory	25
212.	Physics Laboratory	24
213.	Typewriting Laboratory	30
214.	Science Recitation Room	26
216.	Chemistry Laboratory	24
217.	Bookkeeping Laboratory	30
219.	Mechanical Drawing Room	20
220.	Biological Laboratory	24
Assembly Hall provided with seats. Capacity about 400 children.		
Totals		864

The work of the department is of much importance to the city, which has a constantly increasing demand for properly trained office helpers. The department should be properly provided for. Whether it is a problem of scheduling classes, so as to make use of class rooms to a maximum extent, thus releasing one or more rooms for expansion of this and possibly other overcrowded departments, or one of building expansion is a matter for the administration to determine.

There are several limitations to the building and its environments. There is no gymnasium or study hall. The assembly hall is small. The stage is located on the south side. The hall is lighted only on the south side over the stage. All seats face the stage. The seats on the main floor are long benches. The gallery, which is seated with opera chairs, is not used on account of fire hazard. The cafeteria, which is in the basement of the old portion, is a makeshift at best, accommodating under crowded conditions only about ninety-five pupils. The steel-reinforced concrete floors upon which the manual training machines are placed transmit the sound very completely to other portions of the building.

The playground is an open court on the center north side of the block. The grounds are inadequate in size. Every hour thirty-odd street cars pass the building. Since the building is only fourteen feet from the street curbing, the distraction is apparent.

The library is located in the office of the Dean of Women. It is unsuited for either purpose. For use by the Dean of Women, it should have a partition, thereby providing a waiting room and a private office for the dean for use in private conferences with students. As a library the room is too small and inadequately equipped with reading tables and chairs. The library and dean's office should be separated. Adequate provisions should be made for the library in a manner similar to what has been done in the colored high school and a trained librarian employed. Reference material should be greatly increased in amount and made

easily accessible to students while they are employed in the preparation of their lessons.

Provision for maps is inadequate. The authorities have, wisely, provided a special room for history teaching. Maps are kept on racks in a poorly-lighted closet. Handling is difficult and maps are, therefore, rendered less useful. They are also torn in handling by this method. In many of the best high schools, individual steel cases are provided. They are hung about the walls in such manner as to be out of the way when rolled up. The ease with which maps can be used determines in a large degree the extent to which they are used.

There was a lack of filing devices for materials in the rooms. Teachers complained that there was no place to file notebooks and other papers, which are to be kept during the year and sent to the State Department of Education at Austin, for use in passing upon the quality of work for affiliation.

Color of walls.

The writer cannot close this discussion of buildings without a word concerning the color of walls in new portions of buildings. The white walls, found in all new additions, are condemned by the best authorities everywhere. The glare produced in certain rooms is irritating to children's nerves if not positively injurious to eyes. "The standard color scheme for class rooms is as follows: Walls light buff, or very light green; ceiling white or extremely light cream; dado slightly darker than walls; woodwork, furniture, and shades to harmonize in tone; dull finish."¹

SUMMARY AND RECOMMENDATIONS

1. Galveston has made progress in recent years in the solution of her housing problem, but much remains to be done. The Alamo building needs to be renovated and remodeled or replaced by a new structure. The San Jacinto building is little better. Old portions of several other buildings should ultimately be replaced.

¹Standards for Elementary Schools, p. 33, Strayer and Engelhardt, New York: Teachers' College, Columbia University.

2. A study should be made by the administration of teaching equipment and supplies and definite steps taken to make additional provisions for these.

3. The Ball High School should be provided with a library and additional space for special departments to grow, especially if the course of study is liberalized and an effort is made to bring all the children into the high school who should be in it, in accordance with recommendations made in section three of this report. In this connection it is suggested that the authorities consider turning the present high-school building into a junior high school and erecting a new senior high school, with, possibly, a junior college in connection. Such an institution would be a powerful stimulus to students to complete their high-school course and would therefore increase high-school enrollment. This is illustrated by the fact that Austin, with a scholastic population comparable to that of Galveston, has an enrollment for the current session of 2,013 in the 8, 9, 10, and 11 grades as compared with 1,061 for Galveston up to March 5. The drawing power of the University of Texas is undoubtedly a strong factor in bringing about this difference.

4. Special equipment is needed in elementary schools for visual instruction service.

APPENDIX

Scores Given Galveston School Buildings*

Schools for White Children:

Alamo	387
Davy Crockett	785
Brewer W. Key	904
Rosenberg	573
Sam Houston	694
San Jacinto	447
West End—Not Scored	
Ball High School	647

Schools for Colored Children:

West End	286
East End—Not Scored	
Central High	605

*Based on the Strayer and Engelhardt Score Card for Elementary School Buildings, New York: Teachers' College, Columbia University.

SECTION II

A STUDY OF SCHOOL FINANCES IN GALVESTON

B. F. PITTINGER

1. *Scope of study.*

Neither the time nor the money at the disposal of the surveyors has sufficed to make possible a complete financial survey of the Galveston Schools. It has been necessary to fix upon a few basic problems, and to limit the study to these few matters. These basic problems are:

- (1) Is Galveston doing relatively well, or relatively poorly, in her support of public schools?
- (2) Is she financially able to do better?
- (3) Where, in general, is she most generous, and where least generous, in the distribution of funds for schools?

2. *Methods and materials.*

In the main, the financial merits or demerits of a school system can be determined only by *comparison* with other school systems. Such comparisons must be made in terms of *units*—of cost, income, expenditure, etc.—which are common to the different systems.

In this study, certain facts about school financing in Galveston are studied by comparing them with corresponding facts in nine other large Texas cities, i.e., Austin, Beaumont, Dallas, El Paso, Fort Worth, Houston, San Antonio, Waco, and Wichita Falls. The principal units of comparison are in terms of children, for the child is the ultimate unit of the educational system. The units most generally used herein are the "per scholastic" unit, the "per child enrolled" unit, and the "per child in average daily attendance" unit (per A.D.A.).

The basic materials for the study are set forth in Table I. Here are listed, for each of the ten cities (including Galveston), facts gathered from different sources regarding

- (1) Wealth—Assessed and computed real wealth with assessment rates (cols. 2, 3, 4).
- (2) Tax rates, 1925, for school maintenance, city maintenance, city debt, and total city income (cols. 5, 6, 7, 8).
- (3) Value of school property (col. 9).
- (4) Disbursements, for all maintenance purposes, for supplies, repairs and equipment, and teachers and principals salaries, both for white and colored (cols. 10 to 15, inclusive).
- (5) Estimated 1925 population (col. 16).
- (6) School population, in terms of scholastics, enrollment, and average daily attendance, whites and colored (cols. 17 to 25).
- (7) Percentage of total scholastic (or school census) population who are white (col. 26).

This table is inserted for reference, and contains the basic facts from which the "unit" comparisons described in later pages are derived. Sources of the facts listed are shown in the footnotes to the table.

3. *Is Galveston doing relatively well or poorly in her financial support of schools?*

The comparative unit costs upon which the answer to this question is based are set forth in Table II. Here are given, for each of the ten cities studied (including Galveston), the disbursements per scholastic, per child enrolled, and per child in average daily attendance, for each of the following items:

- (1) School maintenance; money from all sources.
- (2) School maintenance; money from local sources only.
- (3) Supplies, repairs, and equipment.
- (4) Total salary costs, all principals and teachers.
- (5) and (6) Salary costs, principals and teachers, separated for whites and colored.

Table II is valuable chiefly for reference. The essential facts contained in this table are exhibited more clearly in the tables which follow:

TABLE 1—BASIC DATA: GALVESTON AND NINE OTHER LARGEST TEXAS CITIES. Data for 1924-1925.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Cities—	Total As- sessed Wealth, 1925*	Assess- ment Rate, 1925†	Computed Real Wealth, 1925	School Maintenance	City Maintenance	City Debt	Total City	Value of School Property	Total Disburse- ments (all sources) School Maintenance, 1924-25‡	Disbursements for School Mainte- nance from Local Sources, 1924-25‡	Disbursements for Supplies, Repairs, and Equip- ment‡	Total Salaries, Teachers and Principals‡		Estimated Population, 1925*	Scholastic Population, 1924-25*	White	Colored	Total	Public School Enrollment 1924-25‡			Pupils in Average Daily Attendance, 1924-25‡			Per Cent Scholastics White
												White	Colored						White	Colored	Total	White	Colored	Total	
Austin -----	\$ 39,284,656	\$.66%	\$ 58,926,984	\$.60	\$1.60	\$.60	\$ 2.20	\$1,317,200.00	\$ 398,948.77	\$ 252,662.47	\$ 19,407.70	\$ 283,787.50	\$ 35,952.50	\$ 319,740.00	50,000	7,316	2,848	10,164	6,993	1,972	8,965	5,541	1,411	6,952	72
Beaumont -----	51,366,280	.75	68,488,373	.70	1.63	.62	2.25	1,433,128.09	399,664.30	316,277.23	29,693.02	252,978.13	48,683.50	301,661.63	50,618	4,898	3,111	8,009	4,973	2,433	7,406	4,298	2,146	6,444	61
Dallas -----	224,517,275	.50	449,034,550	.75	1.8665	.5635	2.43	8,608,920.00	2,228,629.07†	1,567,663.89	106,760.63	1,476,671.00	81,262.00	1,557,933.00	195,000	33,976	6,974	40,950	33,516	5,509	39,025	26,458	3,930	30,388	83
El Paso -----	101,500,000	.70	145,000,000	.70294	1.45664	.49336	1.95	2,880,357.00	938,438.10	806,110.57	43,995.13	792,967.85	11,295.00	803,362.85	104,928	20,555	355	20,890	16,626	293	16,919	13,120	248	13,368	98
Fort Worth -----	153,588,962	.60	255,981,603	1.00	1.7941	.6259	2.42	3,948,631.94	1,363,350.76†	1,077,829.78	65,150.99	1,115,817.36	75,319.65	1,191,137.01	154,840	22,766	3,853	26,619	23,264	3,365	26,629	18,446	2,497	20,943	85
Galveston -----	56,000,000	.75	74,666,667	.40	1.23	.90	2.13	1,654,130.00	408,023.94	221,040.29	25,036.43	253,105.17	56,805.70	309,910.87	48,375	8,052	2,418	10,470	5,498	1,629	7,127	3,989	1,249	5,238	77
Houston -----	214,000,000	.60	356,666,667	1.00	2.145	.73	2.975	9,718,704.84	2,805,238.06†	2,334,712.65†	117,820.31	1,446,773.25	222,197.22	1,668,970.47	164,954	27,500	8,534	35,884	26,186	8,210	34,396	22,759	6,626	29,385	77
San Antonio -----	186,666,000	no data	-----	.85	2.10	.47	2.57	4,331,899.20	1,768,829.85§	1,333,374.83§	80,237.13	1,259,213.37	107,059.78	1,366,303.15	198,069	34,893	3,022	37,915	26,810	2,667	29,477	19,399	1,923	21,322	92
Waco -----	58,025,250	.66%	87,039,875	.65	1.723	.567	2.29	1,788,741.00	470,386.83	515,090.68	19,579.13	371,545.00	36,783.00	408,328.00	43,912	8,334	2,002	10,336	8,776	2,087	10,863	7,070	1,367	8,437	81
Wichita Falls -----	39,910,820	.70	57,015,457	1.00	1.85	.45	2.30	1,705,421.50	339,318.08†	279,312.05	18,019.00	241,475.00	9,260.00	250,735.00	58,624	6,304	586	6,890	7,489	561	8,050	5,552	375	5,927	91

*From Texas Almanac, 1925.
**Includes rate for schools.
†Subtracting items for "buildings and grounds."
§Subtracting items for "short loan payments."
‡Data from annual reports to State Department of Education.
¶From city assessors.
‡Subtracting items for "interest and short loans." These figures for 1923-24.

TABLE II. BASIC UNIT COMPARISONS, IN TERMS OF (1) SCHOLASTICS, (2) CHILDREN ENROLLED, AND (3) CHILDREN IN AVERAGE DAILY ATTENDANCE (A.D.A.); GALVESTON AND NINE OTHER LARGE TEXAS CITIES. DATA FOR 1924-25.

CITIES—	1			2			3			4			5			6		
	Total School Disbursements for Maintenance, from all sources, per Comparative Units per City.			School Disbursements for Maintenance from local sources, per Comparative Units per City.			Disbursements for Supplies, Repairs, and Equipment, per Comparative Units Per City.			Total Salary Costs for All Principals and Teachers, per Comparative Units per City.			Salary Costs for White Principals and Teachers, per Comparative Units per City.			Salary Costs for Colored Principals and Teachers, per Comparative Units per City.		
	Scholastic	Enrollment	A.D.A.	Scholastic	Enrollment	A.D.A.	Scholastic	Enrollment	A.D.A.	Scholastic	Enrollment	A.D.A.	Scholastic	Enrollment	A.D.A.	Scholastic	Enrollment	A.D.A.
Austin	\$39.25	\$44.50	\$57.39	\$24.86	\$28.18	\$36.34	\$1.91	\$2.16	\$2.79	\$31.46	\$35.66	\$45.99	\$38.79	\$40.58	\$51.22	\$12.62	\$18.23	\$25.48
Beaumont	49.90	53.96	62.02	39.49	42.70	49.08	3.71	4.01	4.61	37.66	40.73	46.81	51.65	50.87	58.86	15.65	20.01	22.69
Dallas	54.67	57.36	73.67	38.28	40.17	51.59	2.61	2.73	3.51	38.04	39.92	51.27	43.46	44.06	55.81	11.65	14.75	20.67
El Paso	44.92	55.47	70.20	38.59	47.64	60.30	2.11	2.60	3.29	38.48	47.51	60.12	38.55	47.66	60.40	31.82	38.55	45.54
Fort Worth	51.22	51.20	65.10	40.49	40.47	51.46	2.45	2.45	3.11	44.75	44.73	57.87	49.01	47.96	60.49	19.55	22.38	30.16
Galveston	38.97	57.25	77.90	21.11	31.01	42.20	2.39	3.51	4.78	29.80	43.48	59.16	31.43	46.04	63.45	23.49	34.87	45.48
Houston	78.17	81.55	95.43	65.06	67.88	79.45	3.28	3.42	4.00	46.50	49.52	56.80	52.61	55.25	63.57	26.50	29.06	33.53
San Antonio	46.65	60.01	82.96	35.16	45.23	62.53	2.12	2.73	3.76	36.03	46.35	64.08	36.09	46.97	64.91	35.32	40.15	55.69
Waco	45.51	43.30	55.75	49.83	47.42	61.05	1.89	1.80	2.32	39.50	37.59	48.40	44.58	42.34	52.55	18.37	17.62	26.91
Wichita Falls	49.25	42.19	57.25	40.54	39.73	47.12	2.61	2.24	3.64	36.39	31.17	42.30	38.30	32.24	43.49	15.80	16.51	24.69

(1) *Galveston's rank in "per scholastic" expenditures.*—Table III shows, for each of the six items covered in Table II, the following facts:

Column 1, Galveston's rank in expenditure for each item, among the ten Texas cities. Rank 10 means lowest; rank 1, highest, among the cities. In four of the six items Galveston ranks lowest; in one item she ranks sixth; and in one, fourth.

Column 2 shows the amount spent by Galveston, per scholastic, for each item listed.

Columns 3 and 5 show the amount spent by the city spending most per scholastic, and least per scholastic, for each item.

Column 4 gives the *median* expenditure (midway between cities ranking fifth and sixth) for each item in the ten cities.

TABLE III

Showing Galveston's rank among ten largest Texas cities, "per Scholastic" expenditures for items indicated

Item	Galveston				
	1 Rank	2 Amount	3 Maximum	4 Median	5 Minimum
1. Expenditures for school maintenance; money from all sources	10	\$38.97	\$78.17	\$47.95	\$38.97
2. Expenditures for school maintenance; money from local sources only	10	21.11	65.06	39.04	21.11
3. Expenditures for supplies, repairs and equipment.....	6	2.39	3.71	2.42	1.89
4. Salaries: all principals and teachers.....	10	29.80	46.50	37.85	29.80
5. Salaries: white principals and teachers	10	31.43	52.61	41.12	31.43
6. Salaries: colored principals and teachers.....	4	23.49	33.53	18.96	11.65

Thus a comparison of the amounts in column 2 with the corresponding figures in columns 3, 4, and 5, will show how far Galveston's expenditure varies from that of the most generous, the least generous, and the median city of this group.

Summarizing Table III: Galveston spends, per scholastic, least of all of the ten cities for total school maintenance, whether from all or from local sources, and least of all for salaries of all teachers and principals and of white teachers and principals. She is almost average (ranks 6) in scholastic expenditure for supplies, repairs, and equipment; and slightly above average (ranks 4) in salaries for colored teachers and principals.

When it is remembered that the scholastic population is the best available single measure of what the financial burden of a city school system ought to be, it is clear that for general maintenance and for salaries in the mass Galveston is doing relatively poorly by her schools.

(2) *Galveston's rank in expenditure "per pupil enrolled."* Table IV is constructed like Table III, and is similarly explained. It shows a tremendous leap upward, both in ranks and amounts of expenditure, for Galveston as compared with the other cities. The only explanation seems to be that Galveston gets fewer of her census children into school than do the other cities. Her apparently high rank in expenditure per pupil enrolled is due, not to her relatively large expenditures, but to her relatively small enrollment.

TABLE IV

Showing Galveston's rank among ten largest Texas cities, in expenditures *per pupil enrolled* for items indicated

Item	Galveston				
	1 Rank	2 Amount	3 Maximum	4 Median	5 Minimum
1. Expenditures for school maintenance; money from all sources	4	\$57.25	\$81.55	\$54.71	\$42.11
2. Expenditures for school maintenance; money from local sources only	9	31.01	67.88	41.58	28.18
3. Expenditures for supplies, repairs, and equipment.....	2	3.51	4.01	2.67	1.80
4. Salaries: all principals and teachers.....	5	43.48	49.52	42.10	31.17
5. Salaries: white principals and teachers.....	6	46.04	55.25	46.50	32.24
3. Salaries: colored principals and teachers.....	3	34.87	40.15	21.19	14.75

Her ranks, in both Tables III and IV, on items one and two, are especially interesting. She ranks tenth per scholastic, and fourth per pupil enrolled, in total maintenance expenditures. She also ranks tenth per scholastic and ninth per pupil enrolled in maintenance expenditures derived from local revenues. The only explanation appears to be that she collects a large amount from the State on her census list; which amount, when added to a relatively small local income and spent upon a relatively small enrollment, makes her total maintenance appear unduly large. But it is the State, not the city, which carries the burden.

(3) *Galveston's rank in expenditure per "child in average daily attendance"*.—The facts here are set forth in Table V, which is similar in form and meaning to Tables III and IV. This table supports the conclusions drawn from Table IV, with the additional conclusion (since Galveston's ranks here are even higher than before) that attendance, as well as enrollment, in Galveston is below the standard set by the other cities. Galveston gets fewer of her scholastics into public school; and, of those enrolled, fewer seem to be in regular attendance.

(4) *Interpretation*.—The conclusion seems to be clear that, if Galveston were getting and holding in regular attendance at school as large a proportion of her scholastic population as are the other Texas cities, she would rank at the bottom of the list here given in maintenance and salary expenditures, whether measured in terms of scholastics, children enrolled, or children in average daily attendance. Her apparent high rank in enrollment and attendance expenditures is due to an evident failure to serve her children.

TABLE V

Galveston's rank among ten largest Texas cities, in expenditures per *child in average daily attendance* (A.D.A.) for items indicated

Item	Galveston				
	1 Rank	2 Amount	3 Maximum	4 Median	5 Minimum
1. Expenditures for school maintenance; money from all sources	3	\$77.90	\$95.43	\$67.65	\$55.75
2. Expenditures for school maintenance; money from local sources only	9	42.20	79.45	51.52	36.34
3. Expenditures for supplies, repairs, and equipment.....	1	4.78	4.78	3.40	2.32
4. Salaries: all principals and teachers.....	3	59.16	64.08	54.03	42.30
5. Salaries: white principals and teachers.....	3	63.45	64.91	59.63	43.49
6. Salaries: colored principals and teachers.....	3	45.48	55.69	28.53	20.67

The only escape, apparently, from this conclusion, is that she is serving in some other way (through parochial schools, possibly) that portion of her scholastic population which is not in public school. Evidence on this phase of the problem is presented in another part of this report. (See section written by Dr. Manuel.)

4. *Where is Galveston failing most seriously?*

Tables III, IV, and V show clearly that this city is doing fairly well in her expenditures for (1) supplies, repairs, and equipment and (2) salaries of colored principals and teachers. It appears from these tables that the shortage is in the salaries paid to the white principals and teachers, either because (1) average salaries are too low, or (2) the number of teachers and principals is too few, or (3) both.

The latter phase of this matter is clarified somewhat by Table VI, which sets forth the average salaries (for 1924-25) of white elementary principals and teachers, colored elementary principals and teachers, and janitors, as reported by each city to the State Department of Education. In this table, Galveston holds second rank in salaries for white principals, colored principals, and janitors; sixth rank in salaries for colored teachers, and seventh rank in salaries for white teachers of elementary grades. It appears clear that teachers' salaries are considerably below the average for these ten cities. However, the discrepancy here is not sufficient to account for the great deficiency in per scholastic maintenance expenditure shown in Table III. Besides low average salaries, there seem to be too few teachers; a condition to be improved where the enrollment and attendance are so far off the mark as they appear to be in Galveston.

TABLE VI

Average salaries of elementary principals and teachers, white and colored, and of janitors, as reported by ten Texas cities, 1924-25

Cities	Average Annual Salaries (Elementary)					Janitors (9-mo. basis)
	White Principals	White Teachers	Colored Principals	Colored Teachers		
Austin	2,078.89	1,052.06	1,018.75	650.95	670.50	
Beaumont	1,855.77	1,187.29	1,266.66	750.17	645.30	
Dallas	2,764.00	1,532.00	1,247.00	917.00	756.00	
El Paso	2,206.99	1,318.25	1,800.00	1,055.08	667.98	
Fort Worth	2,481.48	1,401.06	1,242.44	838.63	no data	
Galveston	2,730.00	1,215.94	2,100.00	939.96	886.50	
Houston	2,404.67	1,599.93	1,523.68	1,071.01	No data	
San Antonio	2,359.57	1,384.26	2,631.00	1,338.35	789.64	
Waco	1,978.33	1,147.00	1,020.00	723.00	594.00	
Wichita Falls	1,943.40	1,403.03	1,600.00	1,035.16	936.00	

The principal need, after getting the scholastics more completely into school, appears to be the enlargement and better payment of the teaching staff.

5. *Is Galveston able to bear an increased expenditure for schools?*

The answer to this question is always "yes" for any normal city. There are few if any cities in these United States that absolutely *cannot* increase their income for schools, either by an increase of tax rate, or an increase in property tax valuations, or by both methods. In Galveston, particularly, where the school tax rate is now only 40 cents, with \$1 as the possible legal limit, there would seem to be no doubt from the standpoint of absolute ability.

But how does Galveston's ability to support schools compare with the abilities of other cities listed in this study, which have been seen to be dealing with their schools more generously? Table VII gives us the data. Here appear, first, the assessed wealth per inhabitant for each city, and second, the computed real wealth. The latter, of course, is a mere estimate, found by dividing the total property valuation of each city by the assessment rate current in that city, and dividing this quotient again by the estimated population. (See Table I.)

Galveston is seen to rank high among the ten cities on both matters; i.e., third in assessed wealth and fourth in computed real wealth. On this basis, there would seem to be no question of her ability to increase her support of schools in the directions indicated.

TABLE VII

Assessed and computed real wealth per inhabitant in ten largest Texas cities, 1924-25

Cities	Assessed wealth per inhabitant	Computed real wealth per inhabitant
Austin	\$ 785.69	\$1,178.54
Beaumont	1,014.78	1,353.05
Dallas	1,151.37	2,302.74
El Paso	967.33	1,381.80
Fort Worth	991.92	1,653.20
Galveston	1,157.63	1,543.74
Houston	1,297.29	2,162.22
San Antonio	942.43	
Waco	1,321.40	1,982.14
Wichita Falls	680.79	972.56

There is a second approach to the study of Galveston's ability to increase her revenues for schools. Reference to Table I will show that her tax rate for school maintenance in 1924-25 was the lowest among the ten cities (40 cents), but that her rate of property assessment (75%) was among the highest. It is possible, therefore, that in terms of her actual wealth Galveston is doing as well as any city in the list. A check on this possibility may be found by comparing this rate of assessment with the actual percentages which the assessed values were of the sales prices of property which changed in ownership during the period under study.

For this purpose a random selection was made of seventy-six pieces of property which changed hands during 1925. The sale price, as recorded in the deed of transfer, was found for each piece; also the assessed valuation for that year; and the latter was divided by the former. The result appears in summary form in Table VIII, and in detail in Table IX. If the prices recorded in the deeds of sale are correct, it appears that, for these seventy-six pieces of property, at least, the real assessment rate in Galveston is a little over 50 per cent, instead of 75 per cent as believed. It would seem that some upward revision of assessments, particularly of non-business property, is needed. This step alone could be made to yield a considerable increase in revenues.

TABLE VIII

Percentage which assessed values were of sale values, of seventy-six pieces of Galveston real estate sold during 1925

Type of Property	Number of Pieces	Assessed Valuation divided by sale price
1. Non-business property; unimproved	37	47.54%
2. Non-business property; improved	33	52.78%
3. Business property	6	65.64%
4. Total	76	56.44%

TABLE IX

Assessed values and sale values of Galveston real estate, 1924

Real Estate-Non-business

Not indicated as improved.

No.	Ass'd. Val.	Sale Val.	Percentage Ass'd. Val. is of Sale Val.
1	2,200.00	4,000.00	55.
3	850.00	1,800.00	47.22
5	600.00	2,200.00	27.27
6	1,150.00	3,000.00	38.33
10	450.00	1,800.00	25.
13	1,550.00	4,200.00	36.90
14	550.00	280.00	196.42
17	150.00	800.00	18.75
18	1,600.00	4,500.00	35.55
24	1,700.00	3,000.00	56.66
25	725.00	1,650.00	43.93
31	300.00	1,500.00	20.
32	200.00	900.00	22.22
33	150.00	800.00	18.75
34	550.00	1,525.00	36.06
38	1,450.00	3,000.00	48.33
39	600.00	450.00	133.33
40	800.00	450.00	177.77
42	575.00	1,500.00	38.33
43	3,425.00	8,000.00	42.81
44	550.00	1,030.00	53.39
45	2,850.00	5,000.00	57.
46	200.00	700.00	28.57
47	150.00	200.00	75.
50	500.00	1,800.00	27.77
51	200.00	770.00	25.97
53	2,000.00	6,000.00	33.33
54	200.00	400.00	50.
55	5,900.00	5,516.00	106.98
57	450.00	1,050.00	42.86
60	850.00	2,634.00	32.27
61	300.00	600.00	50.
62	4,500.00	8,500.00	52.94
65	200.00	800.00	25.
68	200.00	300.00	66.66
69	11,550.00	20,000.00	57.75
71	700.00	6,440.00	10.86
Total	50,875.00	107,095.00	47.54

TABLE IX

Assessed values and sale values of Galveston real estate, 1924

Real Estate	Improved	Non-Business	Percentage
No.	Ass'd. Val.	Sale Val.	Ass'd. Val. is of Sale Val.
2	2,125.00	6,500.00	32.69
4	12,050.00	23,000.00	52.39
7	300.00	480.00	62.5
8	2,400.00	3,000.00	80.
9	1,575.00	2,600.00	60.57
11	1,650.00	5,525.00	29.86
12	2,225.00	3,400.00	65.44
15	10,600.00	25,000.00	42.4
16	2,675.00	3,500.00	76.42
19	3,200.00	8,500.00	37.64
20	1,975.00	3,500.00	59.28
21	2,375.00	3,500.00	67.85
22	3,300.00	6,500.00	50.76
23	6,150.00	2,000.00	307.5
26	1,225.00	5,000.00	24.5
28	3,900.00	4,100.00	95.12
29	3,225.00	10,500.00	30.71
30	2,850.00	6,000.00	47.5
35	1,950.00	5,250.00	37.14
36	1,500.00	5,000.00	30.00
37	1,525.00	4,500.00	33.88
41	1,900.00	3,500.00	54.28
48	950.00	2,700.00	35.18
49	4,475.00	8,000.00	55.93
52	7,600.00	3,800.00	200.00
56	350.00	1,700.00	20.58
58	2,325.00	5,800.00	40.08
59	2,250.00	4,500.00	50.
63	1,550.00	2,200.00	70.45
64	3,850.00	7,750.00	49.67
66	4,250.00	7,500.00	56.66
67	600.00	2,500.00	24.
70	500.00	950.00	52.63
Total	99,375.00	188,255.00	52.78

TABLE IX

Assessed values and sale values of Galveston real estate, 1924

Business Property

No.	Ass'd. Val.	Sale Val.	Percentage Ass'd. Val. is of Sale Val.
27	20,050.00	20,000.00	100.25
72	33,000.00	55,000.00	60.
73	11,800.00	22,500.00	52.44
74	14,250.00	35,000.00	40.71
75	19,300.00	22,500.00	85.77
76	19,100.00	24,000.00	79.59
Total	117,500.00	179,000.00	65.64
Grand Total	267,750.00	474,350.00	56.44

SECTION III
GALVESTON SCHOOL SURVEY

H. T. MANUEL

- I. Census, Enrollment, and Attendance.
- II. The Curriculum.
- III. Teachers' Salaries and the Rising Cost of Education.

PREFACE

In presenting the report of the section of the survey of which I have had direction, I wish to express my appreciation to Superintendent Littlejohn and the staff of the Galveston schools for their uniform courtesy and coöperation. Miss Mildred Oser, secretary to the superintendent, was of great assistance in various ways. Mr. Arnold, census trustee, kindly explained his system of pupil accounting and gave other valuable information. Principal James, of the Ball High School, Principal Gibson, of the Central High School, the principals of the grade schools, and the teachers in all the schools, most of whom I have not had the pleasure of meeting personally, have assisted in placing data at my disposal.

Mr. W. R. Smith, a graduate student in education, at the University of Texas, ably assisted in compiling data both in the office of the State Superintendent of Public Instruction and at Galveston.

Officials in the State Department of Public Instruction kindly placed official reports at my disposal.

My colleagues in the survey have assisted greatly by their suggestions and by the data which were gathered under their direction for other parts of the survey. For the particular recommendations that I have made, however, I cheerfully accept full responsibility.

As in other sections of this survey the inquiry has been given direction by the definite question which the survey has

attempted to answer concerning the adequacy of the present school levy. The limited time at the disposal of the surveyor has served to limit the inquiry still further.

A final introductory word will emphasize a fact of which the reader perhaps is already sufficiently conscious—namely, that the report is intended to be wholly constructive and helpful. If it appears too often to be adversely critical, it must not be imagined that the surveyor has been blind to the many good things in the system—rather, he is taking these for granted. Moreover, the criticisms must not be considered as attaching in any way to the persons who happen to be in various positions. It is assumed that everyone is doing his best and is as anxious to improve as anyone else. We shall get along best when we consider the machinery of the system detached from personalities. Problems of personnel are supplementary and not at issue in this section. Galveston has a school system that is already doing a great and important work; it is our common aim to make it better.

H. T. MANUEL.

1. CENSUS, ENROLLMENT, AND ATTENDANCE

Attendance of pupils in the schools is a major factor in influencing school costs. Obviously, the number of pupils in attendance affects directly the provisions that must be made for education in the way of teachers, buildings, and equipment. While in some instances additional pupils may be brought into the schools without increasing the cost materially, it is true in general that the greater the number of pupils educated the higher will be the cost. Expenditures are again involved in the machinery for taking the school census and dealing with problems of attendance.

In the effort to throw light upon attendance as a factor in determining the adequacy of Galveston's present school expenditures, the following major questions have been asked:

(1) How do actual enrollment and attendance in the Galveston schools compare with the enrollment and attendance which should be expected?

(2) If the enrollment and attendance were all that should be expected, what would be the influence upon present school costs?

(3) What, if any, changes need to be made in the present machinery for dealing with problems of census and attendance?

(4) If desirable changes were made in the machinery, how would school costs be affected?

1. HOW DOES THE ACTUAL ENROLLMENT AND ATTENDANCE IN THE GALVESTON SCHOOLS COMPARE WITH THE ENROLLMENT AND ATTENDANCE WHICH SHOULD BE EXPECTED?

The answer to the first question requires the presentation of a few principles of educational policy, which on account of limitation of space and time must merely be stated without argument.

(1) Public schools are maintained for the benefit of the community and the state. They are not institutions of charity designed to give unfortunate individuals things that poverty makes it impossible for them to achieve in some other way. The public schools exist to advance the welfare of the state and of the community.

(2) The public schools achieve this purpose by instructing and training individual children in lines that representatives of the community and state consider valuable. They accomplish their purpose only to the extent that they themselves or other agencies recognized by them reach and affect favorably these individual lives.

(3) The obligation of the public schools is to *every* child. The state depends upon the public schools to extend the benefits of education to *all* children of the community. The census should be taken primarily not for the purpose of getting state aid, but as a device for seeking out those who should be educated. Every one of these children should be considered automatically a ward of the public schools. If he is not in the public schools, the constituted authorities should know why he is not, and they should know whether

he is receiving elsewhere education equivalent to that which the state has provided for him.

(4) The obligation of the local district obviously extends to all children who come within the age limits of scholastics (7 to 17, inclusive), but it goes farther than this. By law, pupils of 5 and 6 years of age are admitted to kindergarten, and the free school age extends upward to 21. The district is expected to compel the attendance of pupils between 8 and 14, inclusive. The obligation, however, goes beyond the principles that have been crystallized into law. Actually the district is obligated by sound educational and civic theory to provide proper educational facilities to the extent that its resources will reasonably permit and to the extent that the children can be educated with substantial returns to the state.

Galveston Fails to Enroll in School Large Numbers of its Future Citizens.

The school census taken in March of each year is supposed to be an accurate enumeration by name, sex, and age, of all children who will be between 7 and 17 years of age the following September. Assuming that the census is fairly accurate, one may accept it as a basis for judging the number of children to whom educational opportunities should be extended. The number of children in the ages just below and just above those included in the census may be inferred with small error from the numbers found for adjacent ages.

The total number of scholastics (children 7-17) for each of the years 1918-1925, inclusive, is given in Table 1, and is shown graphically in Figure 1.

TABLE 1

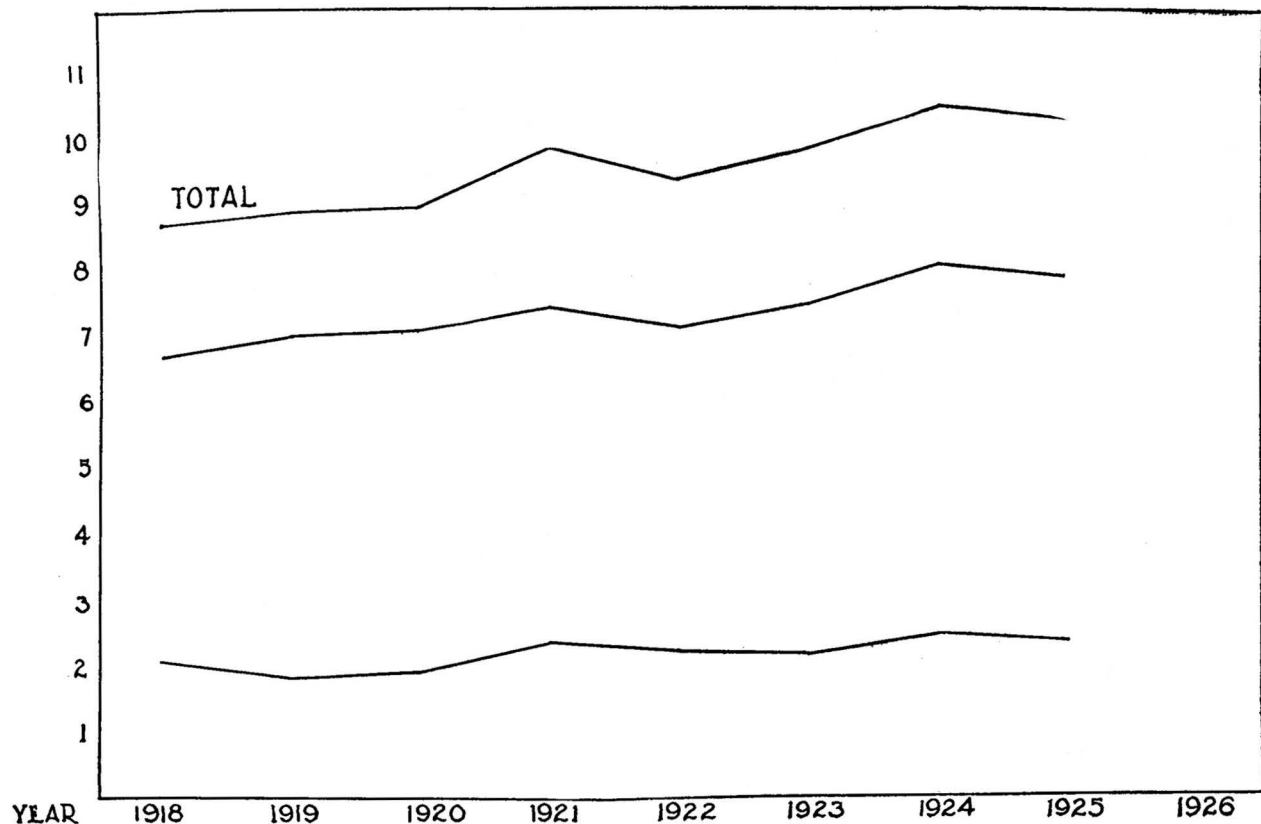
Census Totals from 1918-19 to 1925-26

Year	White	Colored	Total	Percent of increase over preceding year
1918-19	6696	2042	8738	-
1919-20	7008	1857	8865	1
1920-21	7092	1863	8955	1
1921-22	7445	2386	9831	10
1922-23	7146	2248	9394	-4
1923-24	7500	2178	9678	3
1924-25	8052	2418	10470	8
1925-26	7925	2391	10316	-1

During the period from 1918 to 1925 the number of scholastics has fluctuated, usually increasing, but twice decreasing. Starting with 1918 as a basis, an average increase for each year over the preceding year of about 2 per cent would have produced the 1925 total. If this period may be taken as a standard, therefore, the additional annual outlay resulting from increased population will be relatively small.

Thousands
of
Children

FIG 1 CENSUS (CHILDREN AGES 7-17)
1918-1925



It has been reported to the surveyor that the school population is shifting in a way that will require the expansion of school facilities in a certain section or sections, but we have been unable to secure a geographical distribution of the children of school age to compare with the present location of schools. It is recommended, however, that this be done for the information of the superintendent and board of education.

If all children were in school who might reasonably be expected to be there, the total number would probably not be far different from the number of scholastics. Some of the children, of course, would be younger than 7, and some older than 17. A rough estimate of the children of each age whom the schools should expect to enroll is as follows:

Age 5	60 per cent	Enrolled voluntarily by parents with permission of schools.
Age 6	80 per cent	
Age 7	95 per cent	
Age 8 to 14	99 per cent	Compulsory school age.
Age 15	85 per cent	Some will have been graduated from the high school. Others will have gone to work from necessity.
Age 16	75 per cent	
Age 17	50 per cent	At this age many will have gone to work or will have been graduated.
Age 18 and up	30 per cent	(of the number who are 18).

(The above estimates are for white children. At present there is a tendency for colored children to complete the high school course about a year later than the age at which white children complete it. In the above figures no account has been taken of the increase in enrollment that results from shift in population. It is meant that the several percentages of the numbers actually resident in the city at a given time should be in school.)

The extent to which Galveston measures up to the standard just submitted is partially indicated in the next few tables and graphs. In Table 2 and Figure 2 the 1925-26 public school enrollment is compared with the census for 1925. Unfortunately, the enrollment in private and parochial

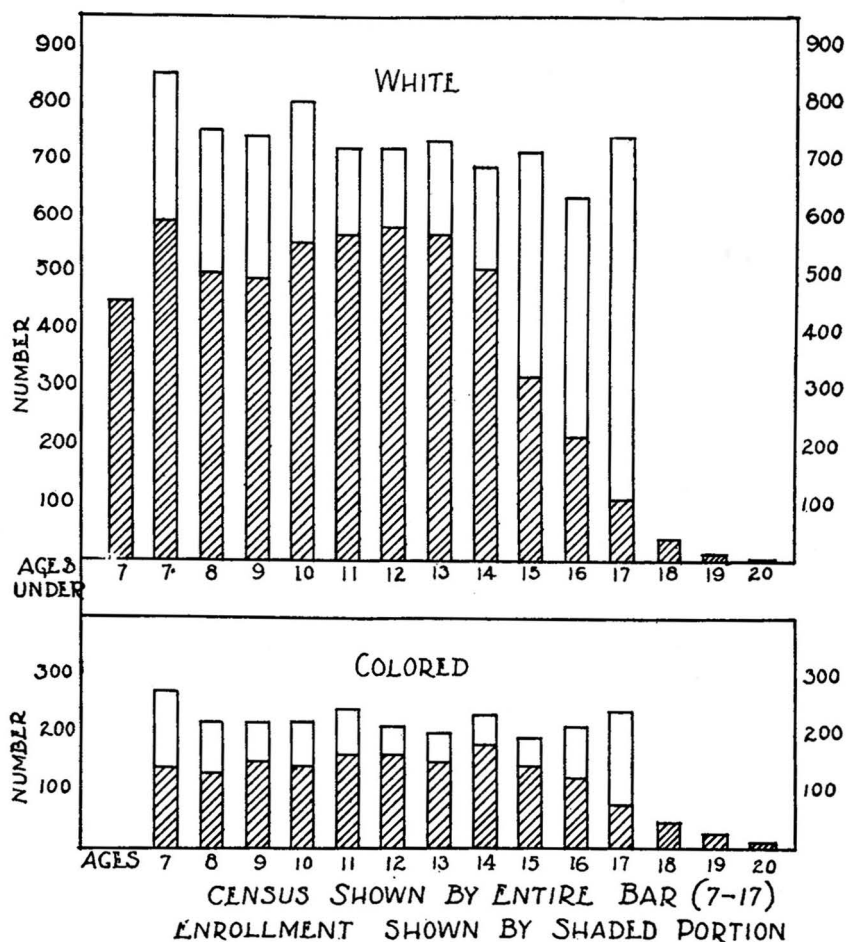
schools was not available for that year. (It seems probable that the enrollment figures in this table and in the four following tables are too large at the ages around 12 on account of twice counting of certain pupils who entered the high school in February.)

TABLE 2

Census and Public School Enrollment by Ages, 1924-25

Age Sept. 1st	Scholastics March 1924	White Enroll- ment in Public School	Percent Enroll- ment is of census	Scholastics March 1924	Colored Enroll- ment in Public School	Percent Enroll- ment is of census	Scholastics March 1924	Total Enroll- ment in Public School	Percent Enroll- ment is of census
Under									
7		448						448	
7	839	593	71	270	140	52	1109	733	66
8	748	501	67	213	133	62	961	634	66
9	738	492	67	213	152	71	951	644	68
10	801	552	69	220	146	66	1021	698	68
11	717	573	81	240	163	68	957	736	77
12	719	579	82	206	162	79	925	741	80
13	724	573	81	197	152	77	921	725	79
14	684	505	74	231	182	79	915	687	75
15	709	320	45	187	143	76	896	463	52
16	632	214	34	206	118	77	838	332	40
17	741	105	14	235	73	33	976	178	18
18		36			39			75	
19		6			18			24	
20		1			8			9	
7-17 Only									
Total	8052	5007	63	2418	1564	65	10,470	6571	63
Grand Total		5498			1629			7127	
Per cent		77%			23%			100%	

FIG. 2. CENSUS AND ENROLLMENT IN PUBLIC SCHOOLS
1924-1925



The enrollment in the ages around 12 appears to be in error on account of a probable twice counting of certain pupils who entered the high school in February.

The enrollment in public schools and in private and parochial schools is given in Tables 3 and 4. Percentages are shown in Figure 3. The figures show that for about every four white children enrolled in the public schools, there is one enrolled in a private or parochial school; that for about every seven colored children enrolled in the public schools, there is one enrolled in a private school; that the enrollment in private and parochial schools is relatively heavier among the children from 7 to 10 than among the children from 12 to 15;¹ and that the percentage of girls in private schools exceeds the percentage of boys.

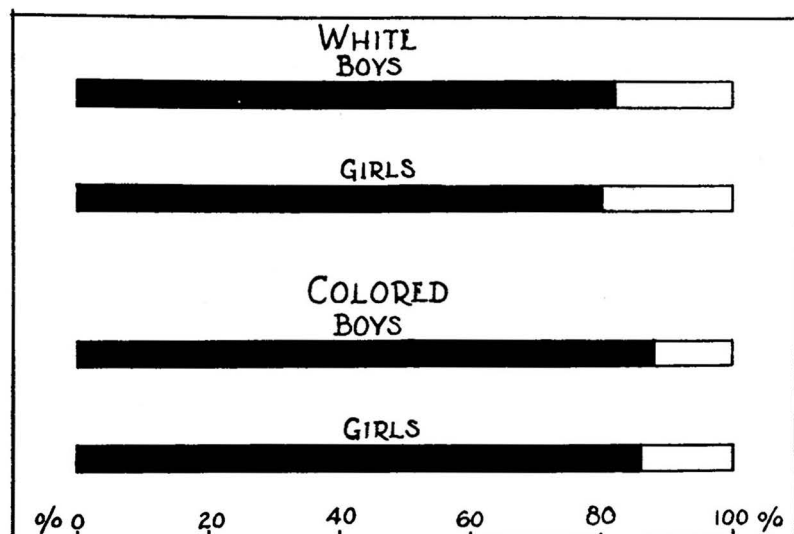
¹This may be the result of twice counting certain pupils who entered high school in February.

TABLE 3

White Enrollment March or April, 1926

Ages	Public School			Parochial and Private			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
5	101	93	194	3	0	3	104	93	197
6	143	140	283	20	18	38	163	158	321
7	181	208	389	84	67	151	265	275	540
8	228	236	464	74	68	142	302	304	606
9	244	241	485	64	76	140	308	317	625
10	240	260	500	70	65	135	310	325	635
11	245	244	489	68	54	122	313	298	611
12	307	310	617	57	75	132	364	385	749
13	293	256	549	40	61	101	333	317	650
14	247	251	498	38	42	80	285	293	578
15	176	181	357	31	46	77	207	227	434
16	105	105	210	28	43	71	133	148	281
17	48	64	112	7	26	33	55	90	145
Total									
7-17	2314	2356	4670	561	623	1184	2875	2979	5854
18	16	20	36	0	7	7	16	27	43
19	6	1	7	0	2	2	6	3	9
20	1	0	1	0	2	2	1	2	3
21	1	0	1				1	0	1
Total	2582	2610	5192	584	652	1236	3166	3262	6428
Percentage	82	80	81	18	20	19	100	100	100

FIG 3.—PERCENT OF ENROLLMENT 1925-26 IN PUBLIC SCHOOLS AND IN PRIVATE AND PAROCHIAL SCHOOLS



PERCENT OF TOTAL ENROLLMENT IN PUBLIC SCHOOLS REPRESENTED BY SOLID BAR —
IN PRIVATE AND PAROCHIAL SCHOOLS BY
UNSHADED PORTION

TABLE 4
Colored Enrollment March or April, 1926

Ages	Public School			Parochial and Private			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
5	-----	-----	-----	2	4	6	2	4	8
6	-----	-----	-----	15	12	27	15	12	27
7	53	66	119	20	28	48	73	94	167
8	69	83	152	7	18	25	76	101	177
9	67	73	140	7	24	31	74	97	171
10	68	80	148	14	12	26	82	92	174
11	70	95	165	12	12	24	82	107	189
12	82	105	187	7	13	20	89	118	207
13	93	111	204	3	7	10	96	118	214
14	79	103	182	4	8	12	83	111	194
15	59	84	143	3	5	8	62	89	151
16	40	55	95	2	4	6	42	59	101
17	22	46	68	0	2	2	22	48	70
Total 7-17-----	702	901	1603	79	133	212	781	1034	1815
18	12	31	43				12	31	43
19	9	13	22				9	13	22
20	3	6	9				3	6	9
21	2	1	3				2	1	3
22	1	0	1				1	0	1
Total -----	729	952	1681	96	149	245	825	1101	1926
Percentage ---	88	86	87	12	14	13	100	100	100

A comparison of enrollment and census (subject to the same possible error of twice counting, previously mentioned) is made in Tables 5 and 6 and in Figure 4.

TABLE 5.
Enrollment of Pupils in Public, Private and Parochial Schools Compared with School Census
(White)

Ages	School Census			Enrollment all Schools			Percent Enrollment is of Census		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
5	-----	-----	-----	104	93	197			
6	-----	-----	-----	163	158	321			
7	437	407	844	265	275	540	61	67	64
8	385	380	765	302	304	608	79	80	80
9	337	379	716	308	317	625	91	84	87
10	345	380	725	310	325	635	90	86	88
11	362	378	740	313	298	611	86	79	82
12	356	368	724	364	385	749	102	105	103
13	369	339	708	333	317	650	90	94	92
14	352	345	697	285	293	578	81	85	83
15	332	366	698	207	227	434	62	62	62
16	328	325	653	133	148	281	41	46	43
17	316	339	655	55	90	145	17	27	22
Total 7-17.....	3919	4006	7925	2875	2979	5854	73	74	74
18				16	27	43			
19				6	3	9			
20				1	2	3			
21				1	0	1			
Total				3166	3262	6428			

Census of 1925-26, taken in March, 1925.

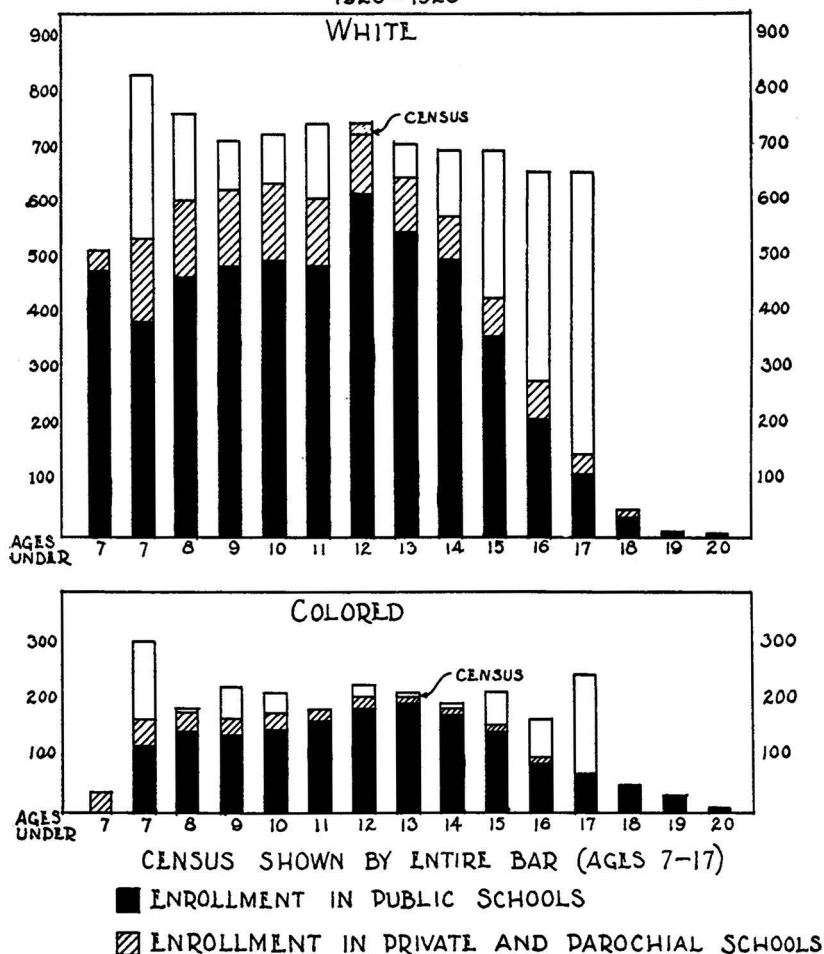
Enrollment reported in March or April, 1926.

TABLE 6

Enrollment of Pupils in Public, Private and Parochial Schools Compared with School Census
(Colored)

Ages	School Census			Enrollment all Schools			Percent Enrollment is of Census		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
5				2	4	6			
6				15	12	27			
7	167	143	310	73	94	167	44	66	54
8	104	90	194	76	101	177	73	112	91
9	106	120	226	74	97	171	70	81	76
10	102	111	213	82	92	174	80	83	82
11	92	98	190	82	107	189	89	109	99
12	120	109	229	89	118	207	74	105	90
13	100	95	195	96	118	214	96	124	110
14	105	94	199	83	111	194	79	118	97
15	110	107	217	62	89	151	56	83	70
16	76	93	169	42	59	101	55	63	60
17	145	104	249	22	48	70	15	46	28
Total 7-17.....	1227	1164	2391	781	1034	1815	64	89	76
18				12	31	43			
19				9	13	22			
20				3	6	9			
21				2	1	3			
22				1	0	1			
Total				825	1101	1926			

Census of 1925-1926, taken in March, 1925.
Enrollment reported in March or April, 1926.

FIG 4 — CENSUS AND ENROLLMENT IN ALL SCHOOLS
1925-1926

From the foregoing tables it is clear that Galveston is falling far short of enrolling in its schools all those whom it should expect to enroll. According to the figures we have, we are compelled to admit that even within the compulsory school age there are literally hundreds of children who in some way are missing their chance for an education. This condition, if true, is nothing less than a tragedy. Possibly

here is one reason why the last census reported that of Galveston's population 10 years of age and over 5.3 percent were illiterate. A sound civic life in a democracy cannot be built on a foundation of ignorance.

If our estimate is correct, raising Galveston schools to the level of effectiveness which everyone should hope for will increase the enrollment at least one-fifth and bring into the schools ultimately about twelve hundred fifty white children and three hundred fifty colored children who are not now there.²

There are in Texas ten cities of 30,000 or more population. In Table 7 these cities are listed, and opposite each are numbers³ indicating the relation of the enrollment and average daily attendance to the census. In Wichita Falls, for example, the number of white children enrolled (1924-25) in the *public schools* was 119 per cent of the number enumerated in the census, while 88 percent of the number enumerated in the census were in average daily attendance. Seven of the ten cities enroll in the white *public schools* a number as large as 95 per cent, or above, of their scholastics—to say nothing of the private schools. Galveston is at the bottom of the list. If the 1926 percentage of enrollment of whites in public, private, and parochial schools of Galveston (81%) were substituted in the above table, the city would still rank very low. Even then, four of the cities would show a greater percentage (based on census) in *average daily attendance* in the *public schools* than Galveston would show *enrolled in all schools*! What part of the difference is the result of population changes between the taking of the census and the following school year, the figures do not indicate.

²This assumes, of course, that there is no substantial error in the figures upon which these calculations have been made.

³Computed from data obtained from official reports to the State Superintendent of Public Instruction.

TABLE 7

Percent of Census Enrolled and in Average Daily Attendance in
Public Schools Ten Texas Cities, 1924-25

	White		Colored	
	Percentage Enrolled	Percentage Average Daily At- tendance	Percentage Enrolled	Percentage Average Daily At- tendance
Wichita Falls.....	119	88	95	64
Waco	105	85	104	68
Fort Worth	102	81	86	65
Dallas	99	78	79	56
Beaumont	97	88	78	69
Austin	97	76	69	50
Houston	95	83	98	79
El Paso	81	64	87	74
San Antonio	77	56	88	64
Galveston	68	50	67	52

An examination of the preceding tables and graphs shows that children are slow in getting started to school and that they drop out in greatest numbers above the age of 14. However, there are few ages anywhere along the line that show a satisfactory enrollment.

The distribution of the enrollment and average daily attendance in the public schools is shown by grades in Table 8. The age distribution of the high school graduates appears in Table 9. These tables contain the data from which Figure 5 was made. In Table 10 the percentage distribution by grades of the total enrollment and of the total average daily attendance in Galveston is compared with a similar distribution for the nine other cities of more than 30,000 population to which reference has already been made. (The figures for Galveston are probably somewhat in error on account of counting again in the high school certain pupils who had been enrolled in the seventh grade during the first semester.)

TABLE 8
Enrollment and Average Daily Attendance, 1924-25

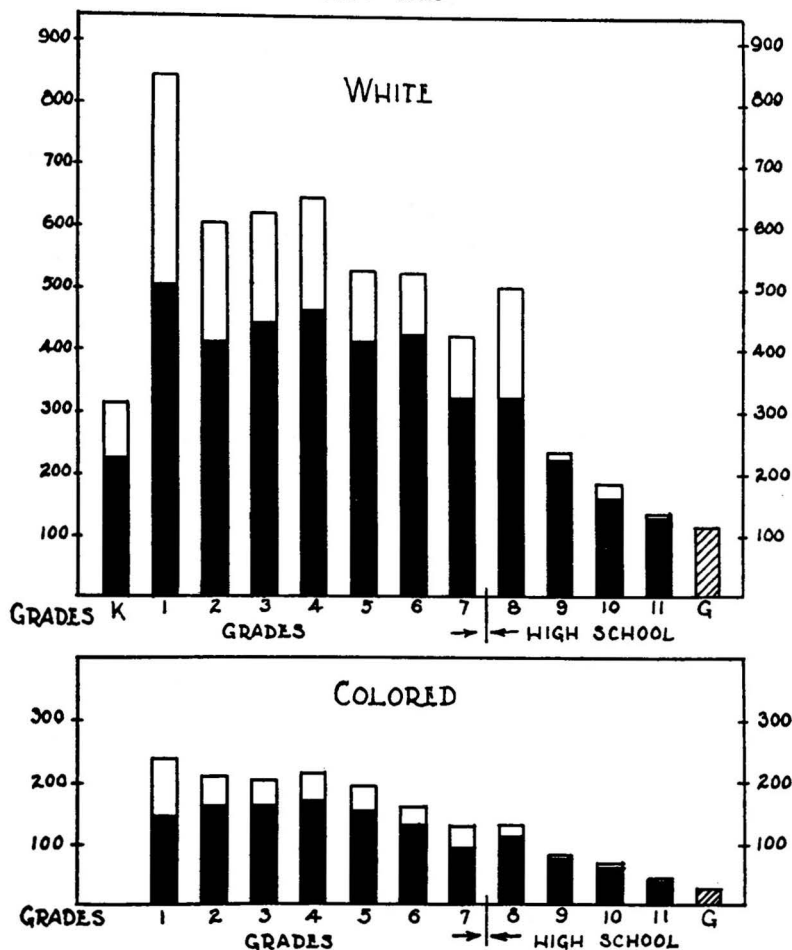
Grades	White						Colored					
	Enrollment			Average Daily Attendance			Enrollment			Average Daily Attendance		
Kindergarten	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	151	156	307	108	113	221						
2	432	407	839	262	240	502	118	117	235	72	70	142
3	306	296	602	205	204	409	107	98	205	82	73	155
4	321	292	613	219	219	438	91	109	200	73	84	157
5	314	328	642	224	240	464	95	115	210	74	90	164
6	261	263	524	205	206	411	77	115	192	64	86	150
7	269	250	519	212	205	417	62	93	155	50	76	126
8	184	232	416	144	171	315	38	86	124	24	63	87
Total Elementary	2238	2224	4462	1579	1598	3177	588	733	1321	439	542	981
9	243	255	498*	157	156	313	47	78	125	40	69	109
10	83	147	230	87	131	218	31	48	79	28	46	74
11	77	101	178	65	89	154	18	45	63	15	42	57
Total High School	56	74	130	52	75	127	16	25	41	12	16	28
Grand Total	459	577	1036	361	451	812	112	196	308	95	173	268
Percent Attendance is of enrollment	2697	2801	5498	1940	2049	3989	700	929	1629	534	715	1249
*See Text. The enrollment by grades immediately before transfers were made to the high school was as follows:												
Grade	7			8			9			10		
White	381			340			226			174		
Colored	111			115			66			54		

TABLE 9

Ages of Graduates of Public High Schools, 1925-26

(From Report to State Superintendent)

		Age	14	15	16	17	18	19	20	Total
White	Boys		1	6	12	21	5	1	---	46
	Girls		1	9	16	21	10	2	---	59
	Total		2	15	28	42	15	3	---	105
Colored	Boys				1	3	4	1	2	11
	Girls				---	4	5	1	---	10
	Total				1	7	9	2	2	21

FIG 5 - ENROLLMENT AND AVERAGE DAILY ATTENDANCE
1924-1925

ENROLLMENT, ENTIRE BAR

AVERAGE DAILY ATTENDANCE, SHADED

K - KINDERGARTEN G - GRADUATES PUBLIC SCHOOLS ONLY

FIGURE FOR GRADE 8 ARE IN DOUBT. (SEE TEXT)

TABLE 10

Comparison of Galveston with Nine Texas Cities in Percentage of Total Enrollment and Average Daily Attendance in each Grade 1924-25

	White				Colored			
	Percentage of Enrollment in each Grade		Percentage of Av. Daily Attendance in each Grade		Percentage of Enrollment in each Grade		Percentage of Av. Daily Attendance in each Grade	
	Nine Cities	Galveston	Nine Cities	Galveston	Nine Cities	Galveston	Nine Cities	Galveston
Kindergarten	3	6	3	6	0.6	0.0	0.5	0.0
1	17	15	15	13	20	14	18	11
2	11	11	11	10	13	13	13	12
3	11	11	11	11	13	12	13	13
4	11	12	11	12	12	13	13	13
5	10	10	11	10	10	12	11	12
6	8	9	9	10	9	9	9	10
7	7	8	8	8	8	8	8	7
Total below								
H. S.	79	81	79	80	86	81	85	79
8	7	10*	7	8	6	8	6	9
9	6	4	6	5	4	5	4	6
10	4	3	4	4	2	4	3	5
11	4	2	4	3	2	3	2	2
Total High School	21	19	21	20	14	19	15	21
Grand Total.....	100	100	100	100	100	100	100	100

The table shows, for example, that 3 per cent of the combined total enrollment (white) of the nine cities is in the kindergarten, while 6 per cent of Galveston's total white enrollment is in the kindergarten.

A better picture of the relation of the enrollment in the high school to that of the seventh grade is shown by taking the figures for one term only, for this eliminates the twice counting which may creep in with the opening of the second term and the moving of certain classes. Table II and Figure 6 show the enrollment for the semester ended February 2, 1926, in the seventh to tenth grades, inclusive:

*Probably inaccurate on account of twice counted.

TABLE 2

Enrollment in Grades 7 to 10, First Semester, 1925-26

Grades	7	8	9	10
Number	391	324	274	155
White				
Per cent of loss		17%	15%	43%
Number	122	112	95	49
Colored				
Per cent of loss		8%	15%	48%

Percentage of loss is computed for grades 8, 9, and 10 by subtracting each enrollment from that of the preceding year and dividing this difference by the enrollment for the preceding year.

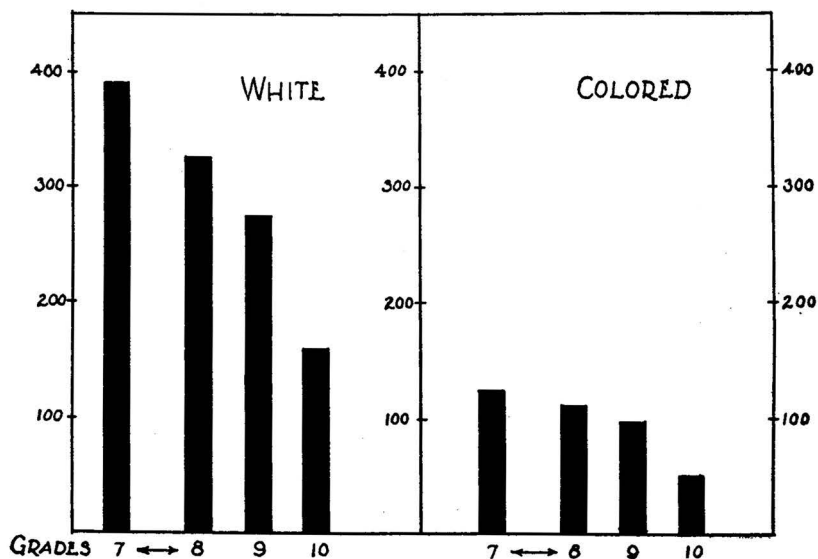
A study of the preceding tables and graphs leads to the following statements:

(1) There is a rapid decline in the attendance of white children of 14 years and older, and of colored children of 15 years and older.

(2) The rapid decline in attendance begins for white children at about the seventh grade and for the colored children at about the sixth grade.

(3) In the high schools there is a marked decline in enrollment after the second year.

FIG. 6. ENROLLMENT IN GRADES 7-10
FIRST SEMESTER, 1925-26



The variation in pupil load from month to month is shown in Tables 12 and 13 and in Figure 7.

TABLE 12

Average Number Belonging and Average Daily Attendance Monthly from October, 1924, to January, 1926, White.

Month	All Schools		Ball H. S.		Rosen-berg		San Jacinto		Key		Alamo	
	Av.* Bel.	Av. D† Att.	Av. Bel.	Av. D. Att.	Av. Bel.	Av. D. Att.	Av. Bel.	Av. D. Att.	Av. Bel.	Av. D. Att.	Av. Bel.	Av. D. Att.
October, 1924	4358	4144	835	805	853	812	512	491	429	407	483	455
November	4397	4119	827	800	883	815	516	492	430	397	492	455
December	4379	4091	819	795	867	803	512	488	429	401	490	449
January, 1925	4358	3932	811	756	878	795	520	468	431	399	483	434
February	4225	3723	904	859	847	692	482	440	381	337	452	390
March	4292	3866	893	849	851	739	493	456	418	376	445	393
April	4257	3836	877	833	844	740	496	453	418	376	435	381
May	4170	3910	865	837	833	775	486	456	417	385	416	386
October	4121	3852	864	826	739	687	608	572	437	406	403	364
November	4146	3832	858	811	741	674	615	572	455	420	405	360
December	4080	3690	840	791	728	636	611	555	455	401	401	352
January, 1926	4043	3728	821	788	721	648	607	562	444	408	403	362

*Average number belonging.

†Average daily attendance.

TABLE 12 (Continued)

Month	Sam Houston		Davy Crockett		West End		Kindergarten	
	Av.	Av. D.	Av.	Av. D.	Av.	Av. D.	Av.	Av. D.
	Bel.	Att.	Bel.	Att.	Bel.	Att.	Bel.	Att.
October, 1924.....	526	505	443	428	63	58	209	183
November	531	498	439	418	66	62	213	182
December	534	495	441	412	68	64	219	184
January, 1925.....	514	468	436	383	70	58	215	171
February	512	446	429	384	64	51	154	124
March	520	466	439	400	64	49	169	140
April	513	465	440	400	64	52	170	136
May	505	480	433	407	62	56	153	128
October	506	477	494	460	70	60	278	235
November	501	470	494	459	77	66	272	203
December	499	441	467	449	79	65	262	191
January, 1926.....	491	451	477	445	79	64	251	177

TABLE 13

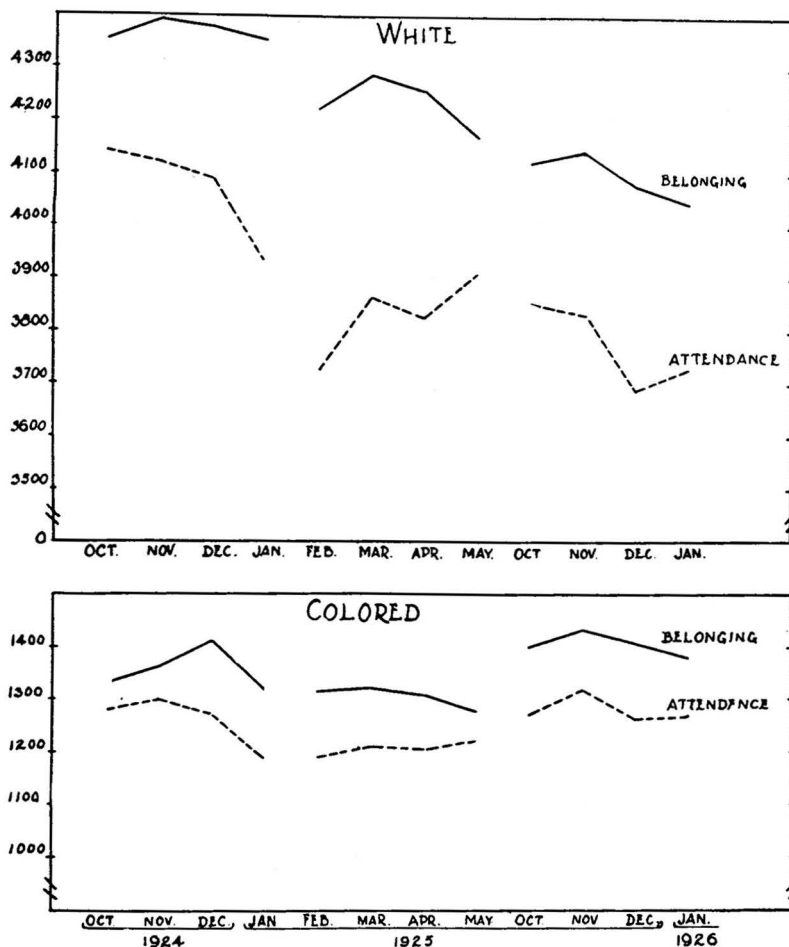
Average Number Belonging and Average Daily Attendance Monthly
from October, 1924, to January, 1926—Colored

Month	All Schools		Central H. S.		East District		West District	
	Av.*	Av. D.†	Av.	Av. D.	Av.	Av. D.	Av.	Av. D.
	Bel.	Att.	Bel.	Att.	Bel.	Att.	Bel.	Att.
October, 1924.....	1330	1284	357	328	330	321	663	635
November	1356	1301	348	331	346	333	662	637
December	1411	1277	341	324	355	335	715	618
January, 1925.....	1322	1191	334	311	344	307	644	573
February	1316	1191	375	362	330	304	613	525
March	1323	1215	364	348	345	318	614	549
April	1308	1208	360	342	345	321	603	545
May	1282	1220	345	338	340	325	597	557
October	1405	1271	335	312	345	327	725	632
November	1436	1318	343	317	356	335	737	666
December	1408	1264	328	307	353	321	727	636
January, 1926.....	1377	1265	316	300	359	335	702	630

*Average number belonging.

†Average daily attendance.

FIG. 7. AVERAGE NUMBER BELONGING AND AVERAGE DAILY ATTENDANCE, OCTOBER 1924 — JANUARY 1926



From the foregoing tables it is clear (1) that the average number of white children belonging is at its peak in November and March; (2) that the average number of white children belonging has declined since the fall of 1924; (3) that the average daily attendance in general is poorest in the winter months; (4) and that the average daily attendance of white children has declined since the fall of 1924.

In an effort to find the particular white schools from which there is the greatest loss of pupils between the last of the elementary grades and the first of the high school grades, Table 13 was prepared. In the February promotions little difference is shown between different schools.

TABLE 14

Comparison of Number of White Children Belonging and Number Promoted in the High Seventh with the Number Who Enter the High School

Schools	Sex	June, 1925		September, 1925	
		Av. No. Bel.	No. Promoted	No. Entering H. S.	Percentage of Promoted Entering H. S.
Sam Houston	B	20	20	20	100
	G	17	15	15	100
	T	37	35	35	100
Alamo	B	13	12	13	108
	G	18	18	12	67
	T	31	30	25	83
Crockett	B	---	---	---	---
	G	---	---	---	---
	T	---	---	---	---
Key	B	10	7	7	100
	G	13	13	11	85
	T	23	20	18	90
Rosenberg	B	25	24	23	96
	G	24	23	18	78
	T	49	47	41	87
San Jacinto	B	12	12	11	92
	G	25	25	20	80
	T	37	37	31	84
Private				1	
Parochial				8	
Out of City				24	

TABLE 14 (Continued)

Schools	Sex	February, 1926		February, 1926	
		Av. No. Bel.	No. Promoted	No. Entering H. S.	Percentage of Promoted Entering H. S.
Sam Houston	B	15	14	14	100
	G	17	17	17	100
	T	32	31	31	100
Alamo	B	7	6	5	88
	G	8	8	8	100
	T	15	14	13	93
Crockett	B	12	12	11	92
	G	17	17	16	94
	T	29	29	27	93
Key	B	12	11	11	100
	G	9	7	7	100
	T	21	18	18	100
Rosenberg	B	14	14	14	100
	G	17	17	16	94
	T	31	31	30	97
San Jacinto	B	18	18	17	94
	G	17	16	15	94
	T	35	34	32	94
Private				0	
Parochial				2	
Out of City				3	

Reasons for withdrawal from the high school during the current year (to March) are given in Table 15. It will be seen that work and lack of interest exact a heavy toll.

TABLE 15

Reasons for Withdrawal from High School

	White		Colored	
	Boys	Girls	Total	Total
Graduated	6	22	28	13
For Work	11	14	25	4
Moved away	4	8	12	9
For private schools	1	2	3	0
Illness	0	3	3	4
Married				8
Apparently uninterested	4	10	14	4
Unknown	7	12	19
Total	33	71	104	42

The age-grade location of pupils is shown in Tables 16 and 17.

TABLE 16
Age-Grade Distribution of White Children 1924-25

Grade	Sex	Under 7	7	8	9	10	11	12	13	14	15	16	17	Total 7-17	18	19	20
K	B	151															
	G	156															
1	B	58	201	94	45	12	17	3		2				374			
	G	72	227	63	27	10	5	2				1		335			
2	B	7	71	104	51	35	18	13	5	1	1			299			
	G	4	62	116	61	28	7	7	7	1	1	1	1	292			
3	B		22	45	90	61	45	26	16	15		1		321			
	G		10	61	116	58	32	10	3	1	1			292			
4	B			7	40	91	73	45	36	14	6	2		314			
	G			11	40	134	63	45	20	13	1		1	328			
5	B				10	28	86	77	29	23	8			261			
	G				10	52	95	54	36	11	3	2		263			
6	B					16	49	81	62	45	13	2	1	269			
	G				2	23	54	88	50	18	12	3		250			
7	B					1	7	33	50	63	21	8	1	184			
	G					1	14	33	89	64	25	6		232			
Total Elementary	B	216	294	250	236	244	295	278	198	163	49	13	2	2022			
	G	232	299	251	256	306	270	239	205	108	43	13	2	1992			
8	B					2	4	21	79	69	41	19	5	240	3		
	G						4	37	68	89	40	11	5	254	1		
9	B							1	7	19	26	22	6	81	2		
	G							3	15	41	50	25	11	145	2		
10	B								1	7	25	27	10	70	6		1
	G									7	30	48	14	99	1	1	
11	B									1	6	12	24	43	10	3	
	G									1	10	24	26	61	11	2	
Total	B					2	4	22	87	96	98	80	45	434	21	3	1
H. S.	G						4	40	83	138	130	108	56	559	15	3	
Total	B	216	294	250	236	246	299	300	285	259	147	93	47	2456	21	3	1
All Grades	G	232	299	251	256	306	274	279	288	246	173	121	58	2551	15	3	
Total B & G		448	593	501	492	552	573	579	573	505	320	214	105	5007	36	6	1

TABLE 17

Age-Grade Distribution of Colored Children, 1924-25

Grade	Sex	Under	7	8	9	10	11	12	13	14	15	16	Total	18	19	20
K	B	7											7-17			
	B															
	G															
1	B	-----	48	36	15	6	7	2	3		1		118			
	G	-----	79	19	10	6	2		1				117			
2	B	-----	1	25	30	26	10	7	3	4	1		107			
	G	-----	9	39	24	11	5	3	3	4			98			
3	B	-----	1	3	24	19	12	13	13	6			91			
	G	-----	2	10	28	29	22	9	5	3	1		109			
4	B	-----			7	12	25	21	19	11			95			
	G	-----		1	11	22	35	23	12	9	2		115			
5	B	-----			1	3	11	24	17	14	4	3	77			
	G	-----			2	12	24	21	20	22	7	3	115			
6	B	-----					1	7	14	20	11	7	2	62		
	G	-----					8	18	17	21	19	7	3	93		
7	B	-----					1	4	2	8	13	7	3	38		
	G	-----					7	14	18	28	15	4	86			
Total Elementary	B	-----	50	64	77	66	67	78	71	63	30	17	5	588		
	G	-----	90	69	75	80	96	81	72	77	57	25	11	733		
8	B	-----						2	14	8	18	3	45	2		
	G	-----						1	4	15	21	22	13	76	2	
9	B	-----						1	2	8	9	6	5	31		
	G	-----						1	1	4	13	18	5	42	4	1
10	B	-----										2	4	10	3	3
	G	-----								1	2	7	14	24	15	1
11	B	-----										5	5	4	5	2
	G	-----									1	1	8	10	9	1
Total	B	-----						1	4	22	19	28	17	91	9	7
H. S.	G	-----						2	5	20	37	48	40	152	30	11
All Grades	G	-----	50	64	77	66	67	79	75	85	49	45	22	679	9	7
Total	B	-----	90	69	75	80	96	83	77	97	94	73	51	885	30	11

On the assumption that seven years is the normal age of a child in the first grade, eight years in the second grade, and so on, the amount of acceleration and retardation is shown in Table 18. (A child of 5 or 6 years, for example, in the first grade is counted as accelerated; a child of 8, 9, or 10 in the first grade is counted as retarded.) In the same table corresponding figures for "842 Independent Districts" of the State are presented. These have been computed from the age-grade distribution given on pp. 226 and 228 of Vol. I of the Texas Educational Survey Report.

TABLE 18

Acceleration and Retardation in Galveston Compared with that in 842 Independent Districts

Grades		White		Colored	
		842 Independent Districts	Galveston	842 Independent Districts	Galveston
1	Acc.	17	16	6	0
	Nor.	41	51	39	54
	Ret.	42	33	55	46
2	Acc.	20	24	9	5
	Nor.	38	37	22	31
	Ret.	42	39	68	64
3	Acc.	23	23	11	8
	Nor.	34	34	17	26
	Ret.	43	44	72	66
4	Acc.	24	15	8	9
	Nor.	32	35	16	16
	Ret.	44	50	76	75
5	Acc.	24	19	9	9
	Nor.	28	35	14	18
	Ret.	48	46	77	72
6	Acc.	23	28	7	6
	Nor.	30	33	14	16
	Ret.	47	40	79	78
7	Acc.	22	21	9	10
	Nor.	30	33	15	13
	Ret.	48	45	76	77
8	Acc.	22	43	9	6
	Nor.	32	32	17	23
	Ret.	46	25	74	71
9	Acc.	27	37	14	22
	Nor.	30	33	21	28
	Ret.	43	30	65	51
10	Acc.	26	39	19	8
	Nor.	35	42	31	17
	Ret.	39	19	50	75
11	Acc.	33	42	30	5
	Nor.	35	38	35	32
	Ret.	31	20	35	63

In general the amount of retardation in the Galveston schools compares favorably with that in Texas Independent

School Districts. But on account of its relative size Galveston should make a much better showing than the 842 Independent Districts with which the comparison is made. In both, the retardation is frightfully high except in the upper grades, when it begins to be lessened by the dropping out of school which occurs in these grades. The retardation may result from a number of factors, among which the major ones are these: (1) late entrance; (2) irregular attendance; (3) maladjustment of school work to individual differences; (4) lack of ability to make normal progress. The first three of these are to some extent remediable, and an earnest effort should be made to minimize them.

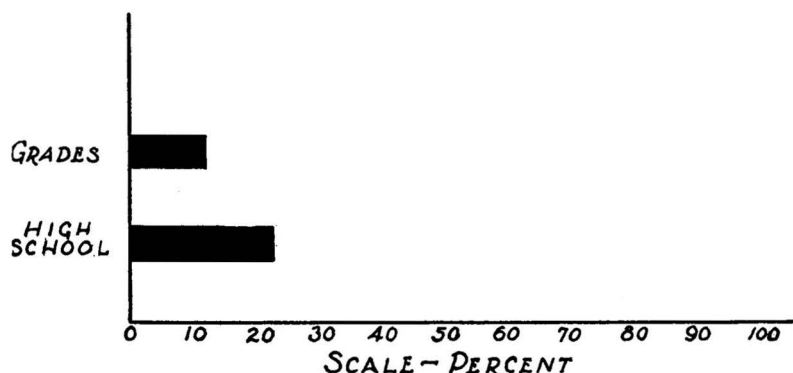
Table 19 shows the number of persons in each grade taking the work of the grade a second time or more. The tabulation indicates that 12 per cent of the pupils in the first seven grades failed in the work of some previous time and are repeating it. In the high school more than one-fifth of the pupils are repeating work which they have tried previously.

Here is probably real educational and economic loss—in many of these cases the schools are probably taking two years to do what should be done in one. In as far as the failures are resulting from low capacity, the number of failures can and should be reduced and progress facilitated by giving the pupils tasks or requiring a rate of progress more nearly suited to the abilities they have. The failures which result from causes such as lack of attendance may of course be reduced in number by eliminating these causes as far as possible.

TABLE 19

Table of Registration and Repetitions (White and Colored) as of March, 1926

Grade	Total No. Pupils Registered	Total No. Pupils Taking Work of Grade Second Time	Total No. Pupils Taking Work of Grade Third Time or More
L 1	383	108	29
H 1	338	43	6
L 2	310	53	10
H 2	335	27	0
L 3	277	24	3
H 3	367	25	5
L 4	339	30	3
H 4	362	38	0
L 5	340	35	3
H 5	352	28	3
L 6	314	32	1
H 6	284	15	0
L 7	258	11	1
H 7	242	9	0
Total	4501	478	64
Percent of Total Registered		10.6%	1.4%
High School			
L 1	253	48	
H 1	179	23	
L 2	222	66	
H 2	162	35	
L 3	132	36	
H 3	96	33	
L 4	108	31	
H 4	60	2	
Total	1212	274	
Per cent total Registration		22.6%	

FIG. 8. PERCENT OF PUPILS REPEATING WORK
OF GRADES

Night schools are recognized as important parts of modern city school systems. The enrollment and average daily attendance in the Galveston night schools are shown in Table 20.

TABLE 20

Night Schools Beginning November, 1924

	No. Enrolled		Av. Attendance	
	White	Colored	White	Colored
November, 1924.....	408	68	316	63
December	456	148	238	63
January, 1925	522	158	186	87
February	539	108	166	47
November	445	131	345	67
December	510	176	328	77
January, 1926	563	184	266	55

In the pages immediately preceding, facts relating to census, enrollment, and attendance have been set forth in some detail. It has been shown that the enrollment and at-

tendance are far below that which should be expected. Some attention has been given, too, to the particular places in the system where the loss appears. In addition, the age-grade location of pupils has been presented in connection with a study of normal progress through the schools. The next task will be to consider the effect which increasing enrollment and attendance and more satisfactory grade location of pupils will have upon school costs.

2. IF THE ENROLLMENT AND ATTENDANCE WERE ALL THAT SHOULD BE EXPECTED, WHAT WOULD BE THE INFLUENCE UPON PRESENT SCHOOL COSTS?

It has been shown that large numbers of Galveston children are enrolled neither in public nor in private schools. Our estimate of the enrollment which may and should be added is about one-fifth of the present enrollment (white and colored). This is on the assumption that private and parochial schools will continue to enroll about the same proportion (19 per cent of white, 13 per cent of colored) of the pupils as they do at the present time. It is quite likely, however, that in the years to come the parochial and private schools will carry a smaller proportion of the load.

Having more children to educate means more teachers, more classrooms, and more equipment. Since the effect of new buildings on costs is not at issue in this study, that phase of the problem will be passed over. The increase in cost of teaching equipment resulting from increased enrollment may be expected to vary roughly with the number of new teachers required. Although costs of general maintenance may not be expected to increase so rapidly as the cost of the teaching staff, the increase in teaching costs may be taken as an approximation of the proportionate increase in total maintenance. What addition in the teaching staff, then, will be required to care for an enrollment one-fifth larger?

Some evidence bearing upon the extent to which present enrollment may be increased without increasing the teaching staff is presented in Tables 21 and 22. In the first of these

is presented the number of pupils belonging per teacher in the several grades from the kindergarten through the seventh grade (colored, first to sixth grades only). The second gives the enrollment by sections for the Ball High School (white). (Since a part of the seventh grade for colored pupils is housed in the Central High School and since the surveyor did not secure the enrollment in this high school by sections, the corresponding figures for colored pupils in grades 7 to 11 are omitted.)

TABLE 21

Number of Pupils Belonging per Teacher, March, 1926, Elementary Schools

White (1)									Total except Kindergarten
Grades	K	1	2	3	4	5	6	7	
No. of Teachers Reporting	4	12	14	12	13	14	14	13	98
Highest No. Belonging	52†	39	43	42	43	44	37	35	44
Mean of No. Belonging	46	29	30	33	34	35	31	29	31
Lowest No. Belonging	34	23	23	23	28	27	24	22	22
Colored (2)									Total Six Grades only
No. of Teachers Reporting		5	5	5	6	5	6		32
Highest No. Belonging		39	34	42	38	34	34		42
Mean of No. Belonging		30	30	32	33	28	25		29
Lowest No. Belonging		25	24	23	28	23	21		21

*No kindergarten for colored pupils.

†Conducted in two half-day sessions.

TABLE 22

Enrollment in Sections of Subjects Ball High School
February or March, 1926

	Subjects	No. of Sections Reported	No. in Smallest Section	Mean No. in Section	No. in Largest Section
Required Subjects	English	34	15	27	39
	Mathematics	37	16	26	35
	History	28	13	27	35
	General Science.....	13	16	26	30
Limited Electives	Latin	11	6	19	32
	French	6	4	8	15
	Spanish	20	15	23	33
	Manual Training....	10	4	14	19
	Domestic Science....	11	4	14	24
	Music	3	20	20	20
Science	Biology	4	14	22	27
	Physics	4	10	19	24
	Chemistry	2	18	20	21
Commercial Subjects	Bookkeeping	6	5	20	34
	Shorthand*	5	20	23	27
	Typewriting*	4	21	25	29
	Commercial Law....	1	5	5	5
Total and Average					
for all Sections.....		194	4	23	39

*Combined section of shorthand and typewriting counted as shorthand only.

The average enrollment per teacher in March, 1926, in white elementary schools, omitting the kindergarten, so far as may be judged from the reports of 98 teachers, was 31. The maximum and minimum were 44 and 22, respectively. The corresponding figures in the first six grades of the colored school were a little lower. In the high school for white children the average enrollment for 194 sections in February or March, 1926, was 23, with a maximum and minimum 39 and 4, respectively.

It is, of course, desirable to keep the number of children per teacher from mounting too high. We are always in danger of neglecting the individual in mass instruction. It is distinctly to the credit of Galveston schools that the enrollment per teacher is as low as it is—provided, of course, that the teaching staff is taking full advantage of this fact to better the educational treatment of individuals. Unfortunately, the limits of the survey have been such as to omit

the giving of standard tests to measure pupil accomplishment. Undoubtedly, the teaching staff should be impressed with the opportunities it has for superior individual work.

With some misgivings, it must be confessed, the surveyor believes that the enrollment of the schools may be increased as much as one-tenth (half the number necessary to raise the level to that which should be expected) without increasing the teaching staff. This, of course, is on the assumption that the load is distributed where the enrollment is now average or under. Some support for this estimate may be found by an examination of Table 23. In this table it is shown that in the year 1924-25, according to reports to the State Superintendent of Public Instruction, among ten large Texas cities, Galveston had the lowest average daily attendance per member of the administrative, supervising, and teaching staff.

TABLE 23

Average Daily Attendance per Teacher, 1924-25, Ten Texas Cities

(Total average daily attendance divided by total number of administrators, supervisors, principals, and teachers. Computed from figures taken from reports to State Superintendent.)

City	Enrollment per Teacher, etc.
Dallas	32.3
Wichita Falls	29.9
Beaumont	28.6
Houston	27.9
Fort Worth	26.1
Waco	25.7
Austin	24.6
San Antonio	23.5
El Paso	23.5
Galveston	21.9

If, then, it is possible to care for 10 per cent more pupils without making addition to the teaching staff, the increase in cost necessitated by the increase in attendance which should be expected may be roughly estimated at 10 per cent of the present costs.

It is recommended specifically (1) that kindergarten training be extended to colored children as soon as possible; (2) that all children be admitted to school upon application of parents at 5 years of age; and (3) that a serious effort

be made to enroll *all* 6-year-olds in school. Obviously, this will require an additional outlay of money as soon as the measures recommended have been put into operation. The increase in costs in the other elementary grades and in the high school will be felt gradually as the enrollment and attendance campaign and a better adaptation to individual differences bring results.

The question arises whether a study of enrollment reveals any economies that may be effected to offset increased costs. And the answer is this: assuming a stationary enrollment, it is probable that some saving can be made by a combination of sections in which the enrollment is small. If the enrollment increases as it should, however, the total cost may be expected to increase at least as much as indicated above.

Our concluding statement, therefore, is that the Board of Education should take measures to meet a possible increase in costs of about 10 per cent occasioned by bringing additional children into the schools who are already in the city, and a possible annual increase of about 2 per cent through increase in scholastic population.

What, if any, Changes Need to be Made in the Present Machinery for Dealing with Problems of Census and Attendance?

This section of the report will not deal with the qualifications of the particular persons who are at present engaged in the work of taking the census and looking after attendance. It is assumed that the Board of Education employs persons who are qualified for the jobs intrusted to them. Our present interest is confined to organization, methods, and records.

As a starting point we should recall that it is the fundamental theory of democracy that *every* child must be educated. Since the child is unable, on account of immaturity, to make intelligent choices for himself, and since unfortunately in a large number of cases the educational ideals of parents are low, it becomes necessary for the State

through the school district to resort to means for stimulating attendance, and in extreme cases to legal compulsion.

It is obvious that the public schools cannot educate those who do not attend. Getting the pupils into school and keeping them in regular attendance should be, therefore, a major activity of the schools. It may be considered unfortunate that persons have to be induced to take advantage of opportunities that are clearly to their interest, but the state has the dual responsibility of guiding children who are themselves incapable of self-guidance and of advancing its own interests by seeing that education is universal. Education is an individual process depending, not upon dealing with aggregates or averages, but upon reaching the individual John, Mary, Carlos, Nita, and so on—10,000 of them in the city of Galveston.

Keeping track of 10,000 children, each as an individual, is no easy task, especially when there is considerable change from month to month in the makeup of the group. However, nothing less than this can serve the purpose of public education.

The present machinery is inadequate to cope effectively and economically with the problem. Specifically, the following changes are recommended:

- (1) The responsibility for census and attendance should be concentrated in one officer instead of being delegated to two, as is the practice at the present time. One person should hold the position of census trustee and attendance officer. These duties for the present may be combined with those of a research specialist to be recommended in another section. The work of each of these positions is sufficiently related to that of the others to be supervised by one person. Indeed, the attendance and census work cannot be done economically, and at the same time effectively, under different supervision and by different persons.

- (2) Employment of this officer, to be called Director of Attendance and Research, should be made for the school or calendar year. The time of the compulsory school period (the first 100 days of the term) and the time for taking the school census (March) are such as not to interfere

greatly with each other, and the combined duties together with those of research are enough to justify a full-time officer.

(3) In the interest of effective work, the census-attendance officer (Director of Attendance and Research) should have a desk in the central office at the city hall, and all records should be kept there. At the time of the surveyor's visit, some of the files were found at the home of the census trustee. If these are regarded as private files, then additional ones should be made for the central office and should be kept there.

(4) There should be close coöperation between the census-attendance department and the school nurses because of the relation between ill-health, or alleged ill-health, and non-attendance at school.

(5) The attendance department should promote enrollment and regularity of attendance, not only during the period named in the compulsory education law, but also at times and for pupils not covered by the law. Among the methods to be used are conferences with parents and various forms of publicity.

(6) The Director of Attendance and Research should be as highly trained for his or her work as a teacher is for the work he or she must do. In addition to the keeping of accurate records, this officer should be expected to accomplish a great deal of constructive social engineering. If time permits, the work of the visiting teachers may well become a part of the regular work of this department. It is of extreme importance to have the proper contact between home and school. It is recommended that a well qualified and tactful white *teacher* and a well qualified and tactful colored *teacher* be employed part time or released from certain other duties to assist in home visitation.

(7) The census-attendance department should keep a continuous live record of *all* children who are of school age. This will require regular reports, in terms of individual children, not only from the several public schools, but also from all the parochial and private schools, and from em-

ployers of children of school age. At the present time the reports and records fall short of this goal.

(8) *Every child, by virtue of his age and residence, should be regarded by the attendance officer as belonging to the public schools.* If he is not there, the reason why he is not there should be known. In the past, the work of the attendance officer has been too largely confined to children who were already enrolled in the public schools and had dropped out or were irregular for one reason or another.

The necessity for adequate records is well illustrated by the difficulty the surveyor has had in getting an accurate estimate of present attendance in comparison with that which should be expected. No records of individual children who had been enumerated in the census, and no records of pupils, even in terms of numbers of different ages and grades, who were attending private and parochial schools, were found in the superintendent's office.

(9) The records to be kept in the central administrative office of the public schools should be adequate to furnish (a) all statistical data required in answering questions which arise in local supervision; (b) all statistical data necessary for reports to the State Department of Public Instruction, and (c) the data needed for economical and efficient discharge of the duties of attendance officer. It will be of advantage to have these records agree so far as possible with standardized forms. In installing such a system the following publications should be of interest and assistance:

Strayer and Engelhardt: "School Records and Reports"
(Bureau of Publications, Teachers' College, Columbia University, N. Y.)

Heck: "A Study of Child Accounting Records" (Ohio State University Studies, Vol. II, No. 9, Columbus, Ohio.)

If Desirable Changes were made in the Machinery for Dealing with Census and Attendance, how would School Costs be Affected?

In making plans for the future, it is pertinent to ask what a modern system of pupil accounting will cost in

comparison with the present inadequate system. Only a rough estimate will be attempted. It will be assumed that the present cost will be required, in the new system, for assistance, and that the additional cost will be practically the salary of the new official, and whatever additional is necessary for supplies. A person properly qualified for this work will cost \$1,800.00 to \$2,500.00. Of this amount \$1,000.00 to \$1,500.00 may be charged to census and attendance, and the remainder to research as described in another section.

II. THE CURRICULUM

What are the pupils being taught? This question lies near the heart of the educational problem. A smoothly running educational system, having all the children in school who should be there and having the most approved equipment and method, will not justify itself unless the right things are being taught in the schools. The information, skills, attitudes, and habits toward which efforts are directed must be of importance and value to the individual and to society.

This, of course, is evident without argument. But when one asks for particulars concerning the things that should be taught and the grade level at which they should appear in the curriculum, the answer is not easy to give. All over the United States today in progressive school systems an answer is being sought to this question. It is a commendable sign of progressive tendencies that Galveston is in the midst of a curriculum study and revision. The Board of Education should give every encouragement to this work.

In view of the curriculum revision now under way, it might seem unnecessary for this limited survey, undertaken primarily from the standpoint of finance, to go into the matter further. As a matter of fact, no thorough study of the Galveston curriculum has been contemplated or made by this committee. However, the nature of the curriculum is a pertinent subject in the study of school finance,

and enough study of it has been made in connection with this survey to enable the surveyor to arrive at a few definite recommendations.

Teachers of elementary subjects very kindly furnished a summary of the subjects taught and the time in minutes per week allotted to them. The subjects taught and the pupil enrollment in the high schools were secured through the kindness of the principals. In addition, the surveyor has had the printed program of studies of the Ball High School and has interviewed the principal of the Central High School relative to the program there. It must be clearly understood that such a study as we have made touches only the fringes of the real problem. It is necessary to know what is being taught under the names of several subjects and the spirit of the teaching before one can make an accurate summary of conditions. Therefore, readers of the survey should not be disappointed with the narrow limits of the comments which it has been possible to make on the basis of the evidence at hand.

A tabular presentation of the subjects taught and the time allotted to them in terms of minutes per week is made in Table 1. This particular tabulation was made to check Galveston practice against that reported in the *Research Bulletin*, Vol. I, No. 5, page 326, of the National Education Association for the eight grades of 49 cities of over 100,000 population.

Since there are practically no electives in the elementary grades, this table represents fairly well the curriculum as it is offered to all elementary pupils in Galveston with the exception of the time allotments, which often vary in the different schools.

[illegible]

TABLE 1 (Continued)

Subject	49 Cities Galveston	1 1	2 2	3 3	4 4	5	6 5	7 6	8 7	Total all Grades
	Cities	105	106	106	96	91	90	84	74	752
Recess	Gal. W.	230	215	225	210		195	175	155	1405
	Gal. C.	225	225	225	225		225	225	225	1575
	Cities	233	228	231	222	224	222	223	215	1798
(Sub-Total)	Gal. W.	340	275	310	300		325	360	260	2170
	Gal. C.	275	285	275	285		225	300	225	1870
	Cities	22	22	25	30	50	65	90	106	410
Industrial Arts	Gal. W.	10			30		†40	95	95	270
	Gal. C.				60		45	95	50	250
	Cities	87	88	87	86	82	75	77	79	661
Drawing	Gal. W.	145	150	145	130		105	90	100	865
	Gal. C.	150	145	140	130		105	100	100	870
	Cities	109	110	112	116	132	140	167	185	1071
Industrial Arts and Drawing	Gal. W.	155	150	145	160		145	185	195	1135
	Gal. C.	150	145	140	190		150	195	150	1120
	Cities	71	74	74	77	76	74	70	75	591
Music	Gal. W.	75	75	100	100		95	90	95	630
	Gal. C.	75	85	100	95		130	125	110	720
	Cities	97	93	99	97	99	98	88	87	758
Miscellaneous	Gal. W.	160	80	90	95		135	200	195	955
	Gal. C.	195	105	85	75		180	160	125	925
	Cities	510	505	516	512	531	534	548	562	4218
Total	Gal. W.	730	580	645	655		700	835	745	4890
Special	Gal. C.	695	620	600	645		685	780	610	4635
	Cities	1290	1415	1495	1528	1545	1528	1574	1559	11,934
Grand Total	Gal. W.	1500	1500	1725	1725		1725	1725	1725	11,625
	Gal. C.	1500	1500	1725	1725		1725	1725	1805	11,705

W—White.

C—Colored.

*Galveston figures are approximated. Errors in certain reports made accurate tabulation impossible.

†Girls only.

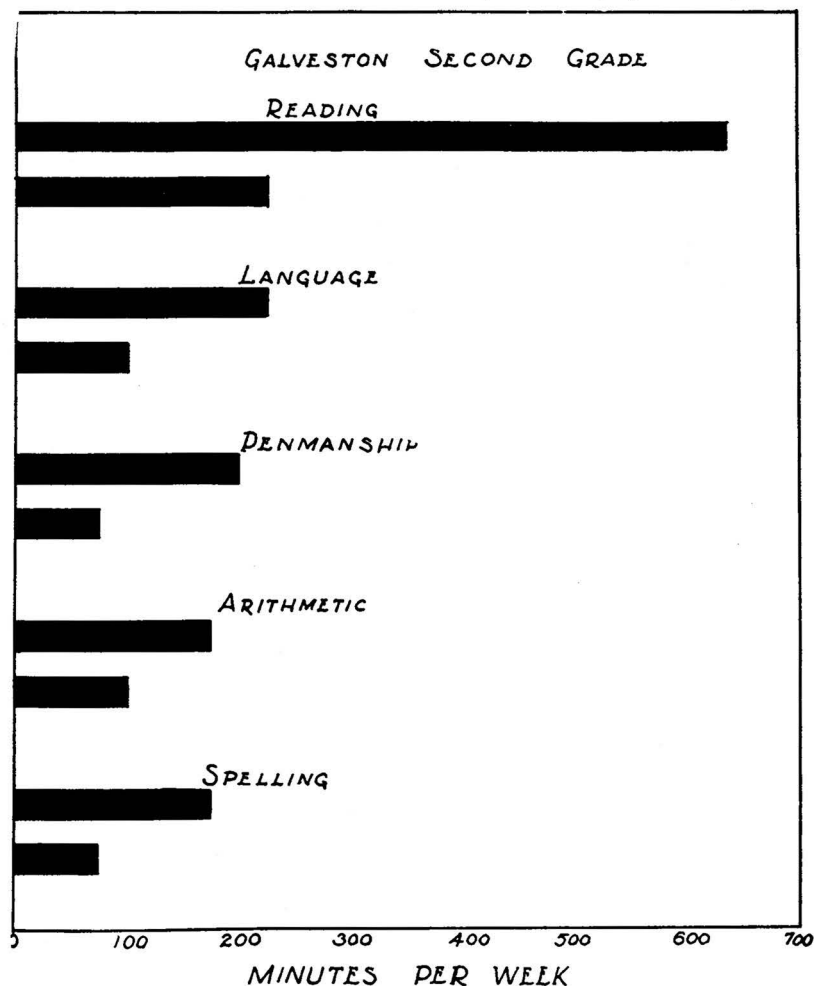
Extreme variations in time allotments are illustrated by examples from the white schools shown in Table 2 and Figure 1.

TABLE 2

Illustrating Extreme Differences in Time Allotments in the Same Grades. (White Schools)

Galveston

	Language		Reading		Spelling		Penmanship		Arithmetic		Music	
	Low- est	High- est	Low- est	High- est	Low- est	High- est	Low- est	High- est	Low- est	High- est	Low- est	High- est
Grade 1	75	175	300	525	25	125	100	125	50	100	50	100
Grade 2	100	225	225	635	75	175	75	200	100	175	75	100
Grade 3	150	200	350	425	100	150	80	100	150	225	100	100
Grade 4	125	150	300	525	80	175	75	100	110	200	60	150
Grade 5	140	175	140	250	60	100	75	100	140	200	70	105
Grade 6	105	175	105	175	60	100	60	100	140	175	70	140
Grade 7	140	280	140	175	45	100	60	100	140	175	65	105

FIG 9. EXTREME DIFFERENCES IN TIME
ALLOTTED TO CERTAIN SUBJECTS

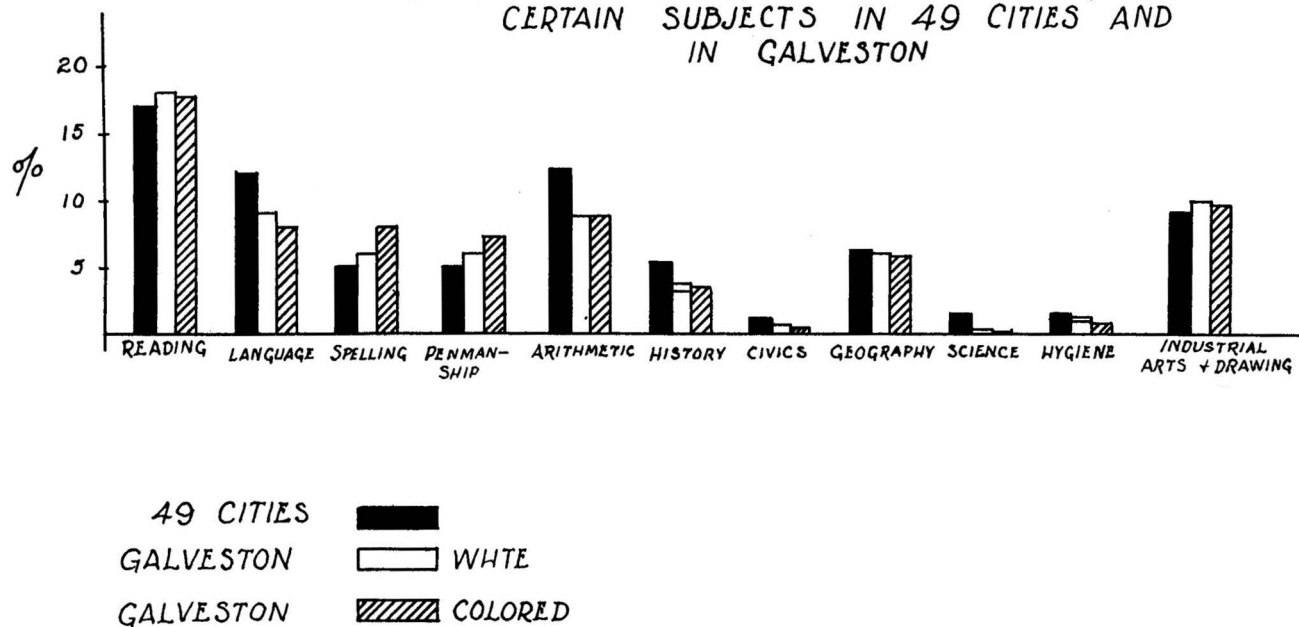
Percentages of the total time taken by the several subjects are indicated numerically in Table 3 and graphically in Figure 2.

TABLE 3

Percentages of Total School Time given to Subjects in Elementary Schools
(Based upon Table 1)

	49 Cities	Galveston Whites	Col.		49 Cities	Galveston Whites	Col.
Language	11.9	9.0	8.2	Hygiene	1.5	1.3	0.7
Reading	16.8	18.1	17.7	Physical Training	6.2	4.3	1.8
Spelling	5.0	5.7	8.4	Supervised Play	1.1	1.0	0.0
Penmanship	4.7	5.8	7.4	Recess	6.3	12.1	13.5
Total—above four subjects	38.4	38.6	41.8	Total Physical Education and Re-	15.1	18.7	16.0
Arithmetic	12.2	8.9	8.9	cess			
The Three R's	50.6	47.5	50.7	Industrial Arts	3.4	2.3	2.1
History	5.2	3.6	3.3	Drawing	5.5	7.4	7.4
Civics	1.0	0.7	0.6	Industrial Arts and Drawing	9.0	9.8	9.6
History and Civics	6.2	4.3	3.9	Music	5.0	5.4	6.2
Geography	6.4	6.0	5.8	Miscellaneous	6.4	8.2	7.9
Science	1.5	0.1	0.0	Total—"Special" Subjects	35.3	42.1	39.6
Geography and Science	7.9	6.1	5.8				
Total—Fundamentals	64.7	57.9	60.4	Grand Total	100	100	100

FIG. 10. — PERCENTAGE OF TOTAL TIME GIVEN TO
CERTAIN SUBJECTS IN 49 CITIES AND
IN GALVESTON



Extreme variations in the time given to subjects within the same grade suggests the need for a study to determine the time allotments which promise best results. It may well be true that different conditions in the several schools and sections justify a certain variation, but the reason for the particular time allotments should certainly be clear. The distribution of time should not be left to chance.

It should not be assumed, of course, that the average practice of 49 cities as recorded in Tables 1-3 necessarily represents the best practice. In all probability it does not. One must not, therefore, place too great reliance upon it. It should be regarded simply as suggestive; it may, however, serve a useful purpose if it calls attention to a few items that deserve particular study.

If the tables may be taken at their face value, the marked disagreements in relative time allotments are in the following subjects:

Galveston gives relatively less time to—

Language

Arithmetic (part of this may be accounted for in supervised study listed under "miscellaneous").

History and Civics

Science

Hygiene in the colored schools

Physical Training

Industrial Arts (balanced by more time given to drawing).

Galveston gives relatively more time to—

Reading

Spelling

Penmanship

Recess (Galveston has a somewhat longer day).

Drawing (balanced by less time given to industrial arts).

Music

Miscellaneous.

A part of the difference may result, of course, from differences in classification of activities. It must be emphasized that the mere name of the subject does not reveal what is taught in it. However, the tabulation raises a strong suspicion that the schools are neglecting science and the social studies in favor of the more formal work. To put it in another way, the suspicion is raised that the curriculum in

some respects has not kept pace with modern educational progress. Offsetting this statement somewhat, it may be said that the emphasis upon music and drawing is commendable—if the work is of the right sort, and this the surveyor has had no opportunity to ascertain. But a failure to give science and social studies their rightful place is a serious one. It is possible, of course, that these items form a part of the work under subjects of other names.

The subjects of study in the high schools and the enrollment in each are given in Tables 4 and 5. A comparison of required and elective subjects in Ball High School with the entrance requirements of the University of Texas is made in Table 6.

TABLE IV

Course of Study and Enrollment by Subjects
Ball High School

(White)

	Required or Elective	First Year			Second Year		
		B	G	T	B	G	T
English	R	189	170	359	132	136	268
Mathematics	R	187	205	392	123	150	273
History	R	14	15	29	131	150	281
General Science	R	169	168	337			
Latin	E*	56	58	114	22	15	37
French	E*				1	19	20
Spanish	E*				108	131	239
Manual Training†	E	82	0	82	28	0	28
Domestic Science†	E	0	90	90	0	30	30
Music	E	7	33	40	1	19	20
Biology	E				57	30	87
Physics	E						
Chemistry	E						
Bookkeeping	E				48	63	111
Shorthand	E						
Typewriting†	E						
Commercial Law	E						
Total		709	739	1443	651	743	1394

TABLE IV (Continued)

	Required or Elective	Third Year			Fourth Year			Total		
		B	G	T	B	G	T	B	G	T
English	R	78	101	179	47	64	111	446	471	917
Mathematics	R	83	94	177	53	69	122	446	518	964
History	R	67	106	173	59	74	133	271	345	616
General Science	R							169	168	337
Latin	E*	16	21	37	8	13	21	102	107	209
French	E*	3	16	19	2	7	9	6	42	48
Spanish	E*	51	75	126	43	48	91	202	254	466
	†			†	*		*			
Manual Training†	E	17	0	17	9	0	9	136	0	136
			*	*						
Domestic Science†	E	0	15	15	0	19	19	0	154	154
Music	E							8	52	60
Biology	E							57	30	87
Physics	E	46	29	75				46	29	75
Chemistry	E				20	19	39	20	19	39
Bookkeeping	E				11	0	11	59	63	122
Shorthand	E	29	41	70	19	28	47	48	89	117
Typewriting†	E	28	52	80	20	28	48	48	80	128
Commercial Law	E	5	0	5				5	0	5
Total		423	550	973	291	369	660	2069	2401	4470

B—Boys

G—Girls

T—Total

*Foreign language is required; one of the three offered is required in each of the last three years; one unit also in Latin or manual training or domestic science or music is required.

†Distribution of enrollment in manual training in the third and fourth years not clear from report. Possible error in tabulation of domestic science in first and third years.

For a degree, 19 units of work are required: English 4, mathematics 4, history 3, general science 1, foreign language 3, Latin or manual training or domestic science or music 1, and three other units elected at the beginning of the second year.

First-year enrollment in manual training includes students listed in "E. Dr."

Twenty-seven pupils are listed in both shorthand and drawing although reported as in one section.

TABLE 5
Course of Study and Enrollment of Subjects Central High School
(Colored)

	Required or Elective	First Year			Second Year			Third Year			Fourth Year			Total		
		B*	G*	T*	B	G	T	B	G	T	B	G	T	B	G	T
English	R	35	74	109	45	71	116	14	37	51	11	37	48	105	219	324
History	R				45	71	116	14	37	51	11	37	48	70	145	215
Civics	R										11	37	48	11	37	48
Algebra	R	35	74	109	45	71	116							80	145	225
Geometry	R							14	37	51	11	37	48	25	74	99
Physics	R							14	37	51				14	37	51
Chemistry	R										11	37	48	11	37	48
Manual Training	R	35		35	45		45	14		14	11		11	105		105
Cooking	R		74	74					37	37					11	111
Sewing	R					71	71					37	37		108	108
Agriculture	R	35	74	109										35	74	109
General Science	E	19	45	64										19	45	64
Latin	E	15	26	41	14	11	25	10	12	22	3	19	22	42	68	110
Biology	E				26	59	85							26	59	85

B—Boys
G—Girls
T—Total

TABLE 6

Required and Elective Subjects for High School Graduation and for Admission to University of Texas

	Number of Units Required of all pupils for graduation		Number of Units Required for admission to University of Texas
	Ball H. S.	Central H. S.	
English	4	4	3
Mathematics	4	4	3
History and Social Science	3	3	2
Physics and Chemistry		2	
Foreign Language	3	See Below	2†
General Science	1	See Below	
Agriculture		1	
Manual Training or Domestic Science		4	
Latin or General Science and Latin or Biology		2*	
Total Number of Prescribed Units	15	18	10
Total Number of Electives	4	2*	5
Total Number of Units Required for Graduation	19	20 (?)	15

The curriculum of the high schools is far too conservative. In the Ball High School even though several electives are offered, the curriculum is so bound down by requirements that the subjects on the elective list do not have a fair chance to attract students. Biology, for example, a subject that when rightly taught has a tremendous significance for modern life, has less than ninety students. In the judgment of the surveyor, it would be hard successfully to defend the setting up of requirements for graduation that are more narrowly prescribed than are the non-too-liberal requirements for admission to the State University. There is little wonder that the enrollment in senior courses is less than half of the enrollment in freshman courses.

*Limited electives.

†Foreign language requirement may be made up after student enters the University.

The requirement in the Ball High School of nineteen units for graduation instead of the customary sixteen is a provision of questionable value. Sometimes it is assumed that the addition of two or three units to the requirements will make it possible to complete the usual number of "solids" and still do a little work that for some reason is regarded as of less importance. It must be remembered, however, that taking five subjects a day instead of four tends to weaken all units. Moreover, a subject that is worth taking at all is probably deserving of credit and respect equal to that accorded to the older subjects.

Again, the requirements appear to be somewhat out of balance. For example, it would be difficult to justify on any other basis than tradition the practice of requiring four years of mathematics and three years of foreign language as against one year of science, when we are living in a scientific age. According to the printed program of studies every student in the last three years of the high school must be taking some foreign language. And why? Is it for admission to the State University? No, for only two units are required for that. Is it because a study of language fits a boy or girl to be a better citizen than would a study of sociology, economics, art, home making, science, and vocational subjects? Probably few will seriously maintain that. Is it because of some vague mental discipline expected in greater degree from language than from the newer subjects? If so, the question needs seriously to be asked whether too much trust is not being placed in a psychology long since discredited. Incidentally, it should be possible to start a modern foreign language in the first year of the high school instead of Latin if a student so elects.

As schoolmen we must continually remind ourselves that the public schools are the schools of the people—high, average, and low alike. Unless we guard against it, we are apt to think of school processes more or less in their relation simply to other school activities and not as vitally related to life outside. Table 7 gives an approximate classification of the occupations of the parents of pupils in the two high schools. Table 8 shows the census distribution of occupa-

tions for Galveston. These tables give at least a rough indication of the homes from which the children come and of the occupations in which they will eventually find a place. Table 9 shows that a very large percentage of high school graduates are not attending college even for a short time. While, of course, the schools must do their duty by those who will continue their education, serious account needs to be taken of the number who will finish their schooling somewhere between the sixth grade and high school graduation.

The surveyor believes from such information as has been placed at his disposal that the problem of adjustment to individual differences is still largely an unsolved one in the Galveston schools. This belief is supported by three lines of evidence. The first of these is the inflexibility of the curriculum. This has been discussed sufficiently for the present purpose in the preceding paragraphs.

The second evidence of poor adjustment to individual differences is the absence, generally speaking, of administrative machinery and organization of schools of such nature as to make easy the differential treatment of children. Among the items which may be expected in a school district of 10,000 scholastics is some kind of administrative recognition of the peculiar problems of the period covered by the sixth, seventh, and eighth grades. In some communities so-called junior high schools are founded. In others, different adjustments are made. The surveyor has not made sufficient study of the Galveston situation to know whether the solution there may be expected in the organization of a junior high school or otherwise, but it is clear that something needs to be done to escape the relative inflexibility of the present system. Housing the high seventh grade of the colored schools with the Central High School is doubtless a step in the right direction. Another serious lack in organization is the absence throughout the system (so far as came to the attention of the surveyor) of clearly defined opportunity rooms or classes for either the mentally retarded or the gifted. No systematic use of x y z ability grouping with different rates of progress through the grades was discovered.

TABLE 7

Approximate Classification of Occupation of Parents of High School Pupils

		Number Percent Ball H.S.		Number Percent Central H. S.	
Executives and Business Employees	Agents, Clerks, Managers, Salesmen, etc.	196	18%	3	1%
Business	Contractors, Merchants, Shippers, etc.	246	23%	4	1%
Agricultural	Dairymen, Farmers, etc.	13	1%	10	3%
Labor	Laborers, Skilled Workmen, etc.	396	37%	184	60%
Professions	Ministers, Physicians, Teachers, etc.	78	7%	14	4%
	Miscellaneous and Unclassified	132	12%	90	30%
	Total	1061	100%	305	100%

TABLE 8

Occupations in Galveston, 1920

(Based upon U. S. Census Report of Persons 10 years of age and older engaged in each specified occupation.)

	Number	Percentage
Agriculture, Forestry and Animal Husbandry....	228	1
Extraction of Minerals	25	0.1
Manufacturing and Mechanical Industries.....	5,524	25
Transportation	5,137	24
Trade	2,557	12
Public Service	855	4
Professional Service	1,152	5
Domestic and Personal Service.....	3,643	17
Clerical Occupations	2,641	12
Total	21,762	100

TABLE 9

High School Graduates and College Attendance Class of 1925

Total Number in Class	Ball H. S.			Central H. S.		
	Boys	Girls	Total	Boys	Girls	Total
	46	59	105	3	8	11
Number of class who attended or who are attending a college, university, or other school of higher education	22	22	44	3	3	6
Percent attending higher institutions	48	37	42	100	38	55

It may be remarked in passing that a significant adjustment to individual differences can be made by a proper placement of pupils in the kindergarten and first grade. The kindergarten and the first grade should be organized in close contact with each other and should interchange pupils freely. Indeed, it would probably tend to unify the work and to make the administration easier if the designation kindergarten were omitted altogether and all beginning pupils were assigned simply to different sections of the first grade. Some children of 5 years of age are ready for regular first-grade work, while others of 7 years of age are not able mentally to do the work of the first grade at the usual rate. If the work were unified, it would be possible to interchange pupils freely according to their mental maturity between activities that are characteristic of the kindergarten and those that come usually in the first grade. The use of standard tests would greatly facilitate the classification of the pupils.

A third line of evidence supporting the belief that too little attention is given to individual differences is found in the replies of teachers (both in the high schools and in the grades) to questions concerning the use of standard educational and mental tests and the adjustments that were being made to individual differences. Up to March, for example, probably not more than one teacher in seven had made any use of standard tests during the current year. Yet standard tests are among the most promising of modern instruments in the educative process. They should have a place in every school program.

What is the way out of the present situation, and what will it cost?

It should be observed that a large step has already been taken—namely, the authorization of and coöperation in this survey. This move is itself clear evidence of progressiveness. Certainly, there is no thought of implying condemnation of administrative officials or teachers in what has been written. On the contrary, it should be realized that persons in authority who see a need and seek help for it deserve commendation. If it were necessary to avoid

a wrong impression on the reader, the writer would gladly go out of his way to praise the superintendent of schools and the high school principals—almost the only members of the teaching and supervisory force with whom he has had personal contact—for their very evident great service to the schools. It is with the purpose of assisting the members of the staff and improving the schools through them that this is written. If it should tend to diminish the confidence of the public in them and make their work more difficult, then the report would by so much fail of its purpose.

The “way out” seems clear to the writer. It lies in the adoption of a program of study and work which will yield its fruits gradually. It is based upon the assumption that in the long run progress can come most surely by preparing the staff for it rather than by imposing apparently progressive measures from the outside. In other words, the program is first of all directed toward the education of the staff and toward giving it direction in working out its own problems. Galveston needs a course of study, a school organization, and provisions for individual differences that are worked out under competent guidance *for Galveston* and primarily *by* those who are most intimately acquainted with the peculiar needs there; a ready-made program imported from some other city and imposed upon a staff unacquainted with it will not furnish an adequate solution. But if progress is to be as surely and rapidly made as it should be, it will be necessary for Galveston to adopt a very definite forward-looking program and to prosecute it vigorously. It would be difficult to overemphasize the urgency of the need.

Happily, the survey found the staff already grappling with the problem of revising the curriculum. The staff of the schools deserves hearty commendation for this. It is recommended that this project be continued and that the program be strengthened and modified as far as necessary to conform to the general plan outlined below.

(1) A definite program of education of the teaching staff should be undertaken. It is not the course of study that appears in printed outlines but the course of study

that gets into the daily work of teachers that really counts. Moreover, if the curriculum is to be modified primarily by persons within the staff, they must have had technical training for this work. Scientific curriculum building is a difficult task, and one in which, from the standpoint of educational theory, a great deal of progress has recently been made. The same thing may be said concerning adjustments to individual differences, in the use of the curriculum. The method of "scissors and paste-pot", in which a person or committee simply looks over many printed courses and attempts on the basis of opinion and prejudice to choose the best topics for a local situation, is antiquated and inadequate. Curriculum revision requires careful study by appropriate technique over a considerable period of time.

It is specifically recommended that during the next few years every teacher be enrolled by request of the Board of Education in one of two or three definitely organized courses. These courses should acquaint the teachers with modern tendencies in education and direct them in solving their own problems. It is recommended that the courses for next year be (a) the curriculum and (b) standard tests and educational treatment of individual differences. It is quite possible that arrangements may be made by those who desire it to receive college or university credit for the work in these courses. If some have had similar courses, their experience may be made of particular value to the whole group. The details of administering these courses can easily be worked out to meet local conditions. In some places, such study groups meet twice each month—once under a local leader and once under a specialist representing a college or university. In any case, of course, the leaders should be competent and progressive. It would be possible, of course, to designate the local leaders now and ask them to take a preparatory course at some institution of higher learning during the summer.

(2) The program of curriculum revision now under way should be amended to include the services of a consulting specialist who would be the technical adviser of the superintendent and various committees. Education, like

industry, medicine, and law, is becoming specialized. It is no disparagement of the present staff to recommend the employment on part time of a curriculum specialist. Similar things are done in every field. In selecting the specialist, care should be taken to get a man of distinctly progressive tendencies. Progress commonly results as a kind of compromise between conservatism and the demand for extreme change. Inasmuch as the system is already conservative, definite efforts should be made to provide a liberalizing element.

(3) Within the school system a qualified man or woman should be employed on full time to direct the work of measurement and pupil accounting. In the section on *Census and Attendance*, this officer has already been recommended. It is expected, of course, that teachers will give and score most of the standard tests employed—except those that are given primarily for survey purposes. The chief purpose of tests is to improve the work of teaching and the adjustment of the educative process to individuals. However, the teachers will need a great deal of assistance in this, and there should be someone whose duty it is to stimulate, direct, correlate, and supplement the work of classroom teachers in the measurement of individual differences. This *Director of Attendance and Research* should be a person specially trained in tests, statistics, and the educational treatment of individual differences.

(4) Revision of the curriculum and adjustment to individual differences should be made a definite objective of the schools for a period of at least two years. The duties of supervisory officers and teachers should be adjusted so that definite constructive work in these lines may be expected without overburdening them. Some will need to be relieved temporarily of certain other duties, that they may have time for this highly important work. The project, moreover, should receive adequate recognition in the budget.

It is impossible to state the cost of curriculum changes until it is known what changes will be made. Many of them can be made without any effect on costs, for a change of subjects does not necessarily mean an increase in costs.

In some places it may be that savings can be made by combining or abolishing small sections. However, it is altogether possible that increased effectiveness in the schools will require an additional outlay of money not wholly counteracted by the savings effected. In other fields one is accustomed to pay for superior products, and one should not expect that education would be an exception to the general rule.

The immediate cost of curriculum revision and adjustment to individual differences can be estimated with much greater accuracy. The estimate for the first year is as follows:

(1) Salary of Director of Attendance and Research.....	\$ 800—\$1000
(Not including amount apportioned to <i>Census</i> and <i>Attendance</i>)	
(2) Expense of curriculum revision.....	1200
(Including expense of outside expert, clerical work etc.)	
(3) Expense of study groups.....	500
(Including small stipend for leaders, and other expenses.)	
(4) Supplies for testing (6,000 pupils at 10c each).....	600
Total.....	\$3100—\$3300

The wisdom of making proposed expenditures must always be judged in terms of the ability to pay and the benefits to be derived. In another section of the report it has been shown that Galveston is amply able to contribute greater sums for public education. In this section and elsewhere, ways in which education may be made to pay greater dividends have been pointed out. It seems not too much to hope, therefore, that the Board of Education will find it possible to act favorably on such of the recommendations as seem to it well founded.

3. TEACHERS' SALARIES AND THE RISING COST OF EDUCATION WITH SPECIAL REFERENCE TO GALVESTON, TEXAS.

One who has examined the expenditures for education over a period of years cannot fail to be impressed by the apparently enormous increase in school costs. A large proportion of the expenditures for maintenance goes, of course, into teachers' salaries. In Galveston, for example, the expenditures for teachers' salaries¹ in 1913-14 were \$100,342.56, while in 1924-25 they had reached \$316,837.79—an apparent increase of 216 per cent. Yet in the same period the school census (children 7 to 17, inclusive) had increased only 40 per cent (7,369 to 10,310). These startling figures demand serious study. Why this increase?

Certain factors bearing on the situation are presented in tabular fashion in Table 1 and discussed in the following paragraphs.

TABLE 1

Increase in Salaries Paid to Galveston Teachers 1913-14 to 1924-25

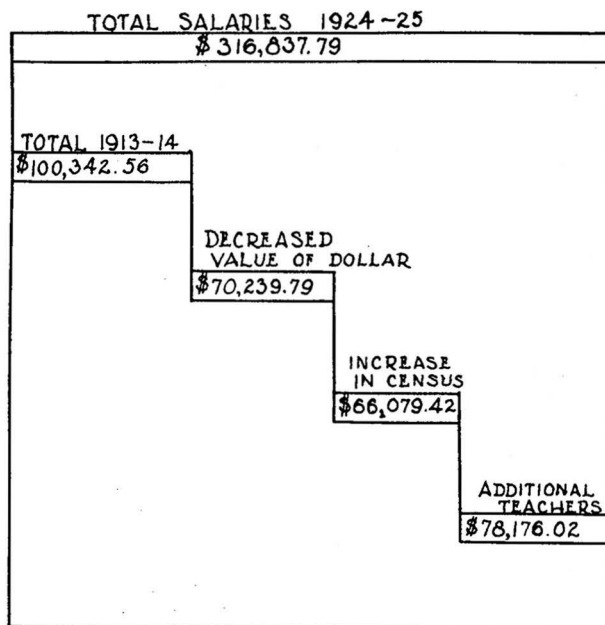
1.	1913-14 salary total in terms of 1913-14 dollar	\$100,342.56	
2.	1913-14 salary total in terms of 1924 dollar	170,582.35	
	(Using U. S. index of cost of living, 170)		
3.	1924-25 salary total	316,837.79	
4.	Increase in salary total for 11-year period on basis of 1924 dollar (Item 3—Item 2)	146,255.44	
5.	Per cent of increase (Item 4 divided by Item 3)		85.7%
6.	School census, 1913-14	7,369	
7.	School census, 1924-25	10,310	
8.	Increase in school census for 11-year period	2,941	
9.	Per cent of increase in school census		39.9%
10.	Salary total in 1924-25 which would have resulted from an increase just as great as the census increase (39.9%)	\$238,661.77	
11.	Difference between Item 10 and the actual 1924-25 salary total (\$316,837.79)	78,176.02	
12.	Per cent of 1913-14 salary total increased and not accounted for by increase in census (Item 11 divided by Item 2)		45.8%
13.	Per cent of Item 10 added to make 1924-25 salary total (Item 11 divided by Item 10)		32.8%

¹Here and throughout this discussion, except as otherwise noted, "teachers" is used to include all members of the administrative, supervisory, and teaching staff who are engaged in the professional side of the work of the schools.

14. Average annual salary all teachers 1913-14, on basis of dollar of 1913.....	783.93
15. Average annual salary all teachers 1913-14, on basis of dollar of 1924.....	1,332.68
16. Average annual salary all teachers 1924-25.....	1,331.25
17. Decrease in average salary over 11-year period.....	1.47
18. Number of teachers 1913-14.....	128
19. Number of teachers 1924-25.....	238
20. Per cent of increase in number of teachers expected on basis of increase in enrollment (Item 9).....	39.9%
21. Actual per cent of increase in number of teachers (Item 19 and Item 18).....	85.9%
22. Per cent of increase in number of teachers above (Item 21, Item 20).....	46 %
23. Number of teachers added above increase expected from increase in enrollment (46% of 128).....	59
24. Per cent number of teachers 1924-25 is above that expected from increase in enrollment.....	33 %

FIGURE 11

ANALYSIS OF INCREASE IN TEACHERS SALARIES



1913-14 COSTS IN TERMS OF THE 1924 DOLLAR

The first step in comparing 1913-14 costs with those of 1924-25 is to express them in common terms. It is well known that a dollar in 1924 was worth in terms of what it would buy only a little more than half of its 1913 value. To be more exact, we are told that it took \$1.70 in 1924 to buy what \$1.00 would buy in 1913.² Assuming that the figures for Galveston would be substantially the same as those of the United States as a whole, let us see what was spent for teachers' salaries in 1913-14 in terms of the 1924 dollar. On this basis the equivalent of the amount spent is \$170,582.35. The amount spent in 1924-25 exceeds this by \$146,255.44, or 85.7 per cent. This is the increase that must be accounted for. The other apparent increase is a wholly spurious one resulting from the decrease in the value of the dollar.

THE INCREASE IN SALARIES AND THE INCREASE IN
SCHOOL CENSUS

The first place to look for the cause of increase is to the number of children who have to be educated. Presumably school costs increase with the number for whom educational provisions have to be made. An examination of the school census shows an increase of about 40 per cent over the 11-year period. If, then, education had been conducted in 1924-25 on the 1913-14 basis, we should have expected 40 per cent increase in census to be paralleled by a 40 per cent increase in school costs. On this basis, \$238,661.77 would have been spent for teachers' salaries in 1924-25. The actual expenditure, however, was \$316,837.79, or 32.8 per cent more than the expected.

When the diminishing value of the dollar is taken into account and when allowance is made for the increase in enrollment, the sum of \$78,176.02 (45.8 per cent of the 1913-14 cost) remains to be accounted for. What did Galveston get for the \$78,176.02?

²Research Bulletin, N.E.A., Vol. 3, Nos. 1 and 2, p. 17.

HAVE SALARIES OF INDIVIDUAL TEACHERS BEEN INCREASED?

In 1913-14 the salaries of all members of the teaching staff (defined as above) averaged \$783.93. This is equivalent to \$1,332.68 on the basis of a 1924 dollar. In 1924-25 the average salary was \$1,331.25—\$1.47 less than the salary paid eleven years ago! Incidentally, it may be of interest to note that the average wage³ of industrial workers in the United States increased 115 per cent (meaning an actual increase of 26 per cent in purchasing power) between 1914 and 1923.

THE NUMBER OF TEACHERS

As it stands now (1924-25) the teaching staff is about 33 per cent larger than that which the increase in enrollment alone would lead us to expect. The 46 per cent increase in total salaries still unaccounted for is paralleled by almost the same percentage of increase in the number of members of the teaching staff above that which the increase in enrollment indicated. It is clear, then, that the increase in the total spent for teachers' salaries has been spent to enlarge the force. We have now accounted for the increase. Is it justified? Is it enough?

SHALL THE NUMBER OF TEACHERS BE REDUCED?

From the foregoing paragraphs, it is clear that \$78,000 could be eliminated from the salary budget by reducing the number of teachers and still the schools would be manned about as they were in 1913-14. But has Galveston more teachers than are needed? The answer is an unequivocal, *No*—that is, if Galveston wants a modern system of schools. In another section it has been shown that the enrollment and attendance per teacher are low in comparison with other cities. In the same section, however, it was shown that there are in the city about a fifth more children who

³Bulletin of N.E.A., above quoted, p. 17.

should be brought into the schools. When this is done, there will not be too many teachers; indeed, there will not be enough. Even to keep the total number as it is without increasing the enrollment would make possible a superior type of work that could not be done with large enrollments per teacher.

Justification for at least a part of the increase in the number of teachers over the 1913-14 level is evident from the following table prepared from data submitted by the superintendent's office as "approximately correct."⁴

TABLE 2

ENROLLMENT AND NUMBER OF TEACHERS

(Not including Superintendents, Principals, and Supervisors)

	Elementary Schools		High Schools	
	1913-14	1924-25	1913-14	1924-25
Enrollment	4929	5598	808	1468
Number of teachers.....	89*	165	25	54
Per cent increase in enrollment		14%		82%
Per cent increase in number of teachers		85%		116%
Enrollment per teacher*	55	34	32	27

Examination of the table shows that the increase in the number of teachers in the elementary schools has made it possible to reduce materially the number of pupils enrolled per teacher. The phenomenal increase in high school enrollment has necessitated a large increase in the number of teachers in this division of the schools.

Furthermore, one must not forget that schools are offering more than they did a few years ago. This fact adds to the demand for a larger teaching staff. The following is a tabular list of significant changes in the offering and organization of the Galveston schools in the period under discussion:

⁴The enrollment figures in this table do not agree exactly with certain others, but time has been lacking to check the discrepancies. The figures are nearly enough correct to show significant facts.

*In 1913-14 there was an enrollment of seventy-one pupils per teacher in the colored elementary schools and fifty-two pupils per teacher in the white elementary schools.

- (1) Manual training and domestic science expanded.
- (2) Kindergartens organized.
- (3) Supervision extended.
- (4) Physical education department organized.
- (5) Commercial department organized.
- (6) Night schools organized.
- (7) Music department expanded.
- (8) Office assistance to superintendent and principals increased.
- (9) Play assistants added.
- (10) Vocational classes organized.

WHAT SHALL BE DONE WITH THE SALARIES OF INDIVIDUAL TEACHERS?

To the answer concerning the advisability of reducing the number of teachers, the answer has been emphatic, *No*. There remains the possibility of reducing salaries of individual teachers. To be sure the average salary in 1924-25 was about the same as that paid in 1913-14. But perhaps it was too high then! It is doubtful whether any thoughtful person even casually acquainted with the facts would take that point of view; however, let us examine the evidence in the case. On what basis should teachers be paid?

Teaching is a form of community service. It is a profession in which there should be a great deal of idealism. It should be attractive to the most capable and the best. Persons who wish to devote their lives to it should not be forced to resort to a kind of "collective bargaining" in order to get just returns for their services. A far-sighted community and board of education will, therefore, assume the responsibility of assuring a just compensation for those who teach the children of the community. They will not take advantage of the situation to beat down salaries to the lowest possible level. Such a policy would be as short-sighted as it is unjust.

If there are any to whom the demands of social justice have no appeal, they cannot fail to be impressed with an argument based on ordinary considerations of supply and demand. On this basis, if no other, Galveston needs to ask two questions: (1) What should be demanded in exchange for a teacher's salary? (2) How much will be required to go into the market and buy this?

The answer to the first question is obviously that the very best to be had is wanted. Every community needs teachers who have high native ability, inspiring personality, upright character, and as good a specific preparation for their work as modern schools of education can give. It is reasonable to demand, too, that they keep up with professional progress while they are in service. Mere experience is not a guarantee of excellence; it may, indeed, merely confirm one in poor teaching habits. Adequate initial preparation and continuous contact with sources of professional advancement are both essentials of effective service in the teaching profession. Educational science is growing so rapidly that one may fall behind in a short time. Those who think that teaching is still primarily a matter of patience and ability to get along with children are pathetically ignorant of modern education. For the sake of the children, to whom the Board of Education has far greater responsibility than it has to teachers, only the best should be employed and retained. It is recommended that a schedule of requirements be adopted for progressive improvement of the teaching staff of the Galveston schools.

The first obligation of a board of education in the matter of teacher employment is to assure the quality of those who are intrusted with the work of education. A poor teacher at any price is a bad investment, while the service of the best can never be fully compensated. There is no money equivalent of the growth in power and character stimulated by worthy teachers. But unless a board of education gives serious attention to standards within the teaching force, it may even pay salaries that are too high. To begin a discussion of teacher employment by talking of salaries is to start at the wrong end; the correct order is standards, then salaries. The board will soon find that it will cost something to compete with other professions and other communities in attracting the type of teachers it ought to have.

It is recommended that Galveston make a study of its salary schedule with a view to its revision. Frankly, it is not reasonable to expect that it will get and retain the best available teachers on the present salary basis. To be sure,

there are some who will remain in the profession regardless of the social injustice of a low wage, and there are some who will remain in Galveston when they might do better elsewhere; but in the long run, to be miserly with teachers' salaries is to invite mediocrity and inferior service. There can be no question about that.

In another section a comparison of certain salaries in ten large Texas cities is presented. To give point to the present discussion, the figures relating to salaries of white elementary teachers are reproduced here.

AVERAGE ANNUAL SALARIES OF WHITE ELEMENTARY TEACHERS

Houston (Galveston's near neighbor).....	\$1,599.93
Dallas	1,532.00
Wichita Falls	1,403.03
Fort Worth	1,401.06
San Antonio	1,384.26
El Paso	1,318.25
GALVESTON	1,215.94
Beaumont	1,187.29
Waco	1,147.00
Austin	1,052.06

ARE THE PEOPLE ABLE TO PAY FOR EDUCATION?

The answer to this question depends upon one's conception of values. Obviously, there is a limit to the ability to pay for anything; some possible expenditures must be curtailed. One's earnings will go only so far. Where shall the saving be made?—that is the question. If a community wants to buy superior education, it can. Galveston can. If it prefers to spend its money for other things, it can do that.

At the present time Galveston is not heavily taxed for education—quite the contrary. In eleven years the maintenance levy has increased only 60 per cent, while the census alone has increased 40 per cent. This levy is now far below that of any other of the ten largest cities of Texas.* In Houston a levy about a third as large as the total city tax

*See Table 1, of Section II.

levy is made for school maintenance; in Galveston less than one-fifth. In no other of the ten cities is the proportion so small as it is in Galveston.

As long as the American people—and it is possible that the people of Galveston are no exception—spend seventeen times as much for various forms of luxuries as is spent for public education, it will be absurd to speak of the burden of education. Education will never bankrupt a nation or a community. In fact, it is a creator of values. Ignorance does not harness the forces of nature to do men's bidding; it does not conquer disease or promote social solidarity. On the contrary, civilization itself depends upon education. If America is saved, economically or socially, it will be through education. In the public schools a community is making an investment, and there is none more productive. What will be Galveston's answer to the challenge?

GENERAL SUMMARY OF FINDINGS AND RECOMMENDATIONS

1. Conditions of housing, equipment, and teaching supplies are, in many respects, unsatisfactory. Especially is this true with respect to teaching supplies. It is recommended that a careful study be made by the administration of the needs and a beginning be made to take care of it through the budget. This applies to the Ball High School as well as to the elementary schools.

2. Funds should be made available at once for renovating the Alamo Building and certain portions of some of the other buildings.

3. Steps should be taken to enlarge the grounds of the Alamo Building if it is to be retained.

4. Most of the schools are in need of additional playground equipment.

5. Galveston ranks low among the ten Texas cities in the percentage of *total scholastics enrolled* in schools. She is also low (tenth) in school maintenance cost from all sources per pupil on the scholastic census rolls. She ranks well up (fourth) in expenditures per pupil enrolled in the schools and third in cost per pupil in average daily attendance.

6. In school *maintenance from local sources*, Galveston ranks low (tenth) among Texas cities with respect to scholastic census, enrollment in school ninth, and average daily attendance ninth. The State, through children not enrolled, is paying a disproportionate share of the cost of education in the city.

7. In assessed wealth per inhabitant, Galveston ranks third and in computed wealth per inhabitant she ranks fifth. In city maintenance tax rate, including schools she ranks ninth. The facts indicate that in comparison with other cities studied, she is able to do better by her children than she appears to be doing.

8. In average annual salaries in elementary schools, Galveston ranks second for principals, both white and col-

ored, fifth for colored teachers and seventh for white teachers.

9. Enrollment of pupils in Galveston is poor in the elementary schools and in the high school. Average daily attendance on the basis of school enrollment is also poor. This suggests need for machinery for a more effective enforcement of the compulsory attendance law. This machinery is suggested in Section III.

10. Age-grade tables and studies of failures indicate a large amount of retardation. There is also much variation in the amount of time given the same subject in a given grade of the various schools. These suggest need for liberalizing the course of study and a strengthening of supervision through the establishment of a research department, and more uniform requirements in time requirements.

11. Section II indicates (page 23) that Galveston's tax rate for schools is low, being only 40 cents on the \$100. This is the lowest of any of the Texas cities. On the other hand, Galveston is third in assessed wealth and fourth in computed real wealth per inhabitant on the basis of a reputed 75 per cent assessed valuation. Tables 8 and 9 indicate, however, that the assessed valuation is near 50 per cent of the real wealth rather than 75 per cent. Thus we have the possibility of increased school revenue through increase of assessed valuation as well as by a raise in the tax rate.

12. A careful study of the curriculum in Galveston should be made by the supervisory and teaching staffs under the leadership of an expert brought in from the outside.

13. Salaries of teachers should be raised to maintain pre-war standards and to meet competition of other Texas cities of the class of Galveston.

